

Institute for  
**Policy Integrity**

NEW YORK UNIVERSITY SCHOOL OF LAW



# Corporate Climate Risk

*Assessment, Disclosure, and Action*

CONFERENCE BRIEF

Summary of October 2020 Conference

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# I. Introduction

It is clearer than ever before that companies must assess and disclose climate-related risks, as well as take action to mitigate those risks. The physical consequences of climate change have begun to arrive in devastating and costly ways, from the wildfires on the west coast of the United States to the ever-more-frequent hurricanes and flooding events across the country. These harms are already affecting investment portfolios. From 2015 to 2019, direct economic losses from extreme weather events in the United States totaled more than \$500 billion.<sup>1</sup> Despite a clear void in federal leadership in recent years, investors, media, and the public have finally brought these mounting risks into the mainstream, and the private sector and several government advisory committees have begun to take meaningful steps to measure and address their potential consequences.

In addition to climate change's physical threats, investors and issuers are also slowly responding to the transition risks it presents, such as the billions of dollars of assets that remain invested in fossil fuels and related infrastructure that will increasingly lose value in a warming world that must transition to clean energy. For example, the oil and gas "supermajor" bp (formerly British Petroleum and Beyond Petroleum) announced it would drastically cut oil production and reach net-zero emissions by 2050.<sup>2</sup> On the investment side, Morgan Stanley pledged to reach net zero financed emissions by 2050.<sup>3</sup> While Morgan Stanley's move was received by many stakeholders as an important step in the right direction,<sup>4</sup> critics took issue with its distant deadline and unanswered questions around implementation.<sup>5</sup>

## The Conference

On October 2, 2020, the Institute for Policy Integrity at New York University (NYU) School of Law and the Volatility and Risk Institute at NYU Stern School of Business convened a conference bringing together investors, companies, researchers, and regulators to discuss climate-related financial risks and identify opportunities to better assess, report, and act on them.<sup>6</sup> In the day's keynotes and panel discussions, speakers explored what can be done to better evaluate the costs of both physical and transition risks so that markets can accurately incorporate climate-related risks into asset prices. To date, industry leaders have employed a hodgepodge of tools and techniques, but a number of countries' regulators have begun to establish specific standards for the assessment and disclosure of climate risks. The day's conversations suggested that a similar regulatory response may be needed in the United States.

In an opening panel on assessing the financial risks of climate change, speakers from Ceres, a nonprofit that works with investors and companies to address climate change and other sustainability challenges, PwC, a professional services firm that focuses on assurance and accounting, and Four Twenty Seven, a California-based climate risk data firm affiliated with Moody's, discussed how current regimes facilitate the collection of climate risk data. Despite the U.S. Securities and Exchange Commission's (SEC) hesitance to mandate climate-related disclosures, private actors have organized amongst themselves to gather necessary information. However, absent federal regulation, disclosure of this information is not mandatory or standardized, which discussants noted hinders comparability across companies. Climate-related disclosures are also subject to different levels of auditor assurance and therefore are less reliable than other categories of financial disclosures.

In the next conference session, three prominent economists—Nobel Prize winner Robert Engle, NYU Stern professor Richard Berner, and Commodity Futures Trading Commission (CFTC) Climate-Related Market Risk Subcommittee member Nathaniel Keohane—positioned physical and transition risks in the context of the stability of the broader financial system. These speakers then discussed policy options for mitigating risks, such as implementing an economy-wide carbon tax.

Representatives from Sodexo and Con Edison (ConEd), along with a legal expert on climate change risk management, then discussed the current state of corporate climate risk disclosure. Margaret Peloso, a partner at Vinson & Elkins, discussed the legal issues surrounding disclosure, including materiality and lack of standardization. According to Peloso, to date, climate-related risks have not typically been seen as material and worthy of disclosure from the perspective of many corporate managers, but a large subset of investors now believes they are. In a world without standard reporting requirements, it is difficult to compare between companies and sectors, and companies have difficulty planning for future reporting. The representatives from Sodexo and ConEd provided real-world examples of how their companies are working to identify, address, and report climate-related risks, and how their voluntary actions are affected by policy.

Finally, in a closing keynote address, former SEC Commissioner and current NYU School of Law Professor Robert Jackson expanded upon certain facets of the debate around mandatory disclosure of climate risk, and how various proposals envision a regime for the United States. Jackson explained that the U.S. government could be doing more, including through new regulations, or better enforcement of existing regulations, and through more robust Environmental, Social, and Corporate Governance (ESG) strategies, to increase corporate climate risk disclosure. He warned against tasking solely the “American boardroom” with solving society’s complex environmental and social problems, and also stressed that international cooperation is essential to truly addressing climate risks in the financial sector.

This brief highlights some of the major points of discussion from the conference.<sup>7</sup> The intention of the event was to highlight different perspectives, and not necessarily to seek an agreement on particular policy, economic, or legal issues. As such, this brief intends to summarize different viewpoints of conference participants and is not intended to be a consensus or recommendation document.

## II. Assessing the Financial Risks of Climate Change

In the first panel, Brigham McNaughton of PwC, Veena Ramani of Ceres, and Lindsay Ross of Four Twenty Seven discussed how current regimes facilitate the collection of climate risk data and why the absence of regulation makes it difficult to compare risk across companies. This section is a summary of their conversation.

Climate change poses a number of materially important risks to companies. Climate-related risks can be divided into two categories: those associated with the physical impacts of climate change, and those associated with the inevitable transition to a low-carbon economy.

Physical risks encompass damages resulting from the physical consequences of rising global temperatures—like more frequent and stronger storms and more sustained and extreme heat waves and droughts. Generally, capital-intensive companies with large geographic footprints have the most exposure to physical risks, while service-based companies may face less. However, no companies are completely immune. Events like hurricanes and wildfires, which are projected to increase in severity and frequency with climate change, have wide-reaching effects across the economic system. Last year's wildfires in Sydney, Australia, caused productivity losses of \$12 to 50 million per day from transportation infrastructure disruptions and illnesses from wildfire smoke.<sup>8</sup> And last year's hurricane season in the United States caused an estimated \$22 billion in damages due to everything from the destruction of buildings to wage losses.<sup>9</sup>

Transition risks take into account the financial impacts of, among other things, future litigation, regulation, market evolution, technology innovation, and stranded assets. Fossil-fuel companies are particularly exposed; over the next fifteen years, decarbonization efforts could cause \$1 to 4 trillion in fossil-fuel assets alone to be wiped out of the global economy.<sup>10</sup> But other industries also face massive transition risks. For example, a carbon tax designed to meet emission-reduction goals in line with the Paris Agreement would cost airline companies three to four times their net income.<sup>11</sup>

Increasingly, third-party service providers are offering assessments of climate risks. For example, Four Twenty Seven is the leading provider of data and analytics on the physical risks associated with climate change. Lindsay Ross, Director of Global Client Services at Four Twenty Seven, explained how the firm cross-references asset information with climate models to calculate predictions of direct and indirect impacts. Around the world, this information is already used by government agencies, commercial banks, investors, and asset managers, and will soon be incorporated into credit risk ratings.<sup>12</sup> A number of central banks and supervisors in the Network of Central Banks and Supervisors for Greening the Financial System agree that the exposure of all types of asset classes to climate hazards represents a systemic risk. As such, the Bank of England and the Banque de France have begun leveraging data from Four Twenty Seven to disclose the physical climate risk within their own portfolios.<sup>13</sup>

To properly assess or predict the physical risks they face, companies need to have asset-level data. However, Ross noted there are major challenges hindering both the collection of asset-level data and the aggregation of that information up to the company level. For instance, companies must overcome difficulties with coordinating among subsidiaries as well as maintaining the confidentiality of trade secrets.

Where companies cannot or will not disclose the necessary information, investors and other stakeholders may be able to turn to publicly available information. For example, databases like Bureau van Dijk<sup>14</sup> and data on global trade flows can provide a holistic view of a company's exposure to climate risk in their operations, supply chains, and markets. But Ross believes that the extent and utility of this publicly available information remains limited unless and until regulators mandate more comprehensive disclosures.

Properly calculating exposure to both physical and transition risks is also dependent on taking into consideration a reasonable range of possible futures, according to Brigham McNaughton, Director of Sustainability Services at PwC. This is referred to as scenario analysis. Scenario analysis is essential to understanding risk profiles for sudden versus gradual transitions to a low-carbon future. Large institutional investors have been calling for more information on what may happen under different scenarios; however, absent formal guidelines and standardization, it is left to companies to choose which scenarios to use. Unfortunately, this means that even if a company completes an extensive scenario analysis, investors have to parse through that company's assumptions and determine whether they were reasonable and useful.

Furthermore, once the relevant data is collected and climate-related risks are assessed, companies can choose to disclose this information in myriad ways. The number of reporting frameworks and their voluntary nature exacerbates the lack of comparability across disclosures. However, at least for information directed towards investors, McNaughton explained, the Task Force on Climate-Related Financial Disclosures (TCFD) has emerged as the leading standard for how companies should disclose and manage climate risks and opportunities. Used by companies with aggregate market capitalization of over \$12.6 trillion,<sup>15</sup> the TCFD recommendations have swiftly become a new worldwide norm.

Investors and stakeholders are calling for a mandate to replace voluntary TCFD adherence, but, even such a mandate would not assure that the numbers reported by companies are accurate. While traditional financial reporting provides reasonable assurance to investors and other stakeholders because auditors attest that material error does not exist, auditors provide limited assurance for ESG reporting (which includes climate risk reporting). The panelists generally agreed that more aggressive regulatory guidance from the SEC could enable the audit industry to raise the level of ESG reporting assurance. In other words, mandating disclosures is separate from mandating assurance over those disclosures; until both mandates are executed in the United States, readers of public financial reporting and other ESG reporting must keep in mind which aspects are subject to audit opinion, if any.

A federally mandated regime may also induce more action on climate risk mitigation, the panelists noted. Despite our ever-increasing knowledge of the severity of climate-related risks, the United States has been decarbonizing very slowly. Between 2007 and 2015, U.S. greenhouse gas emissions decreased by 1.6% a year on average<sup>16</sup>—a rate that comes nowhere close to the reductions needed to meet international climate targets like a 2-degree Celsius carbon budget. Veena Ramani, Senior Program Director of Capital Market Systems at Ceres, pointed out that inaction on climate-related risk assessment and disclosure, and subsequently inaction on the mitigation of climate-related risks through decarbonization and other efforts, affects U.S. competitiveness.<sup>17</sup> It could be helpful for U.S. financial regulators to step in. Other countries' financial regulators (e.g. China, and the EU) have already done so. But disclosure efforts in the United States are still voluntary and piecemeal.

A recent report from Ceres identifies 50 actionable steps for U.S. financial regulators that would affirm climate as a systemic risk, integrate climate change into prudential supervision, mandate climate risk disclosure, and build coordination with the broader regulatory community.<sup>18</sup> For example, the steps include recommendations that the SEC "make clear that the consideration of material [ESG] risk factors, such as climate change, is consistent with investor fiduciary duty," and that

the CFTC use the recommendations of the Climate-Related Market Risk Subcommittee's report "to enhance oversight of climate risk in the commodities and derivatives market."<sup>19</sup> Ramani, the author of the report, presented these takeaways and more. As regulators of the world's largest economy, Ramani argued, U.S. regulators have a particularly strong duty to take action on climate risk.

There has been some U.S. regulatory movement previously, but Ramani noted that it has largely been ineffective. For instance, while securities risk reporting has improved since the SEC released its 2010 guidance on climate risk disclosure, disclosure remains "quite limited in scope."<sup>20</sup>

According to McNaughton, U.S. regulators must move to remove ambiguity around climate risk disclosures, perhaps by aligning SEC guidance with the TCFD framework. McNaughton presented findings from his experience advising clients in a range of industries on sustainability strategy development using quantitative analysis and stakeholder engagement. Notably, PwC is a member of TCFD, and McNaughton was able to corroborate how the TCFD can enable effective climate risk disclosure and action. In fact, in a recent report, the U.S. CFTC, too, recommends that "financial regulators and the entities they oversee [] consult with stakeholders, including investors, businesses, global peers, and other financial market intermediaries, to create a U.S. climate disclosure regime."<sup>21</sup> That CFTC report provides principles for effective disclosure in line with the TCFD principles.<sup>22</sup>

Critics of increased regulation argue that sophisticated, granular ratings can sufficiently relay climate risk information to the market. But Ramani pointed out that credit ratings have significant limitations. It is true that the ratings community is becoming better at integrating risks into their models, but mandating better data assessment and disclosure would lead to better ratings. Furthermore, investors want to be able to see, through the eyes of management, how a company is thinking about risks. Investors cannot get this information from third-party sources like ratings agencies. Thus, regulation that mandates comprehensive but streamlined disclosures would support better decisionmaking by investors and, in turn, support more efficient markets.

In summary, the panelists agreed that climate change poses significant financial risks through both physical risks and transition risks. Investors are calling for better assessment and disclosure of these risks. Private actors have been responding to this call with ever-improving tools and techniques. But federal financial regulators have a role to play in setting standards and mandates for disclosures, as greater levels of assurance and comparability will allow the market to more accurately respond to climate risk and incorporate it into asset prices. The shape and extent of that regulatory role is yet to be determined, but the United States can look to other countries that have gotten a head start.

### III. Economic Implications of Climate-Related Risks and Opportunities for Mitigation

In the day's second session, Nathaniel Keohane of the Environmental Defense Fund, Robert Engle of NYU Stern School of Business, and Richard Berner of the NYU Stern Volatility and Risk Institute discussed how climate change poses serious risks that, if ignored, will undermine the financial system's ability to support the American economy.<sup>23</sup> This section is a summary of their conversation.

The market is just beginning to appropriately price transition risk, taking into account the vast quantities of stranded assets that climate change will create. This can be seen in the fact that the risk premium (alpha) for non-fossil fuel portfolios is now positive, whereas it used to be negative. However, markets are preparing for stranded assets across the economy, not just within the fossil-fuel sector. Stranded assets will be prevalent across landscapes as varied as current farmland and farming infrastructure, as warming temperatures cause agricultural migration, and buildings in New York City, as the sea level rises.

Engle and Berner emphasized the importance of connecting the dots between localized physical risks and threats to the financial system at large. This does not just mean climate-induced threats to infrastructure, but also damages in terms of labor productivity, health and mortality, and more. While the U.S. financial system is fairly resilient (i.e. the major Wall Street banks are well diversified), there are regional and sectoral pockets where physical risks are already translating into risks for financial institutions. Take, for example, agricultural credit institutions, which tend to be concentrated in particular areas like the agricultural Midwest. Climate-exacerbated extreme weather events like severe drought or flooding (or both) in a season can generate enough credit stress to destabilize these institutions. In turn, it becomes harder for farmers, who are dependent on the agricultural banks for affordable credit, to recover from the original climate-related shock.<sup>24</sup>

As assessment and disclosure of climate-related risks is growing, markets are beginning to price climate risk. But Engle noted that that price is not yet as high as the actual risks. Because climate-related risks are so widespread yet varied, financial institutions need better ways to evaluate which companies are best prepared. Traditional ESG metrics and reporting represent a first step only. There is much more information to uncover, and, when it is uncovered, it needs to be widely available. For example, BlackRock, the world's largest asset manager, has at its disposal very granular information on sea level rise and real estate, but BlackRock keeps that data proprietary in order to take advantage of arbitrage opportunities. Similar stories play out in the market with agricultural models.<sup>25</sup> High-quality information on risks should instead be widely available to investors. In fact, it may be considered a public good, as the public needs to understand what risks they are taking by investing in certain companies.

The discussants believe that policy interventions can help. Scientific consensus supports the fact that climate-related risks are massive, regardless of exactly how those risks will end up playing out on a granular level. Many climate impacts are irreversible on a human timescale, so the need for ex-ante avoidance of accumulating risks is more urgent than any financial threat previously experienced.<sup>26</sup> Policymakers can start addressing, or mitigating, climate-related risks by putting a high price on carbon. While an array of interventions will be needed to effectuate the accurate pricing of climate risk in

the market, quickly implementing an economy-wide price on carbon emissions will be particularly crucial for avoiding a climate-related financial crisis. Unfortunately, current prices on carbon, where they exist, are too low.

The longer it takes for a price on carbon to be implemented, the more drastic the measures will need to be to limit warming, and the greater the likelihood of transition-related financial losses.<sup>27</sup> According to the panelists, comprehensive, economy-wide pricing of carbon implemented now can ensure the transition is smooth and orderly rather than disruptive and costly.<sup>28</sup> Keohane referred to a price on carbon as “the single most important instrument we can put in place.”<sup>29</sup> Early adoption and commitment to a carbon pricing scheme will also provide the regulatory certainty markets require for financial planning and investment.<sup>30</sup> One such investment is in research. Technological advancements that solve for how to sequester carbon on a large scale could help mitigate the risks of climate change, and a price on carbon could incentivize research in this area.

Another key policy recommendation from Keohane was to allow pensions to invest in ESG strategies. In June 2020, the U.S. Department of Labor proposed a rule<sup>31</sup> that limits Employee Retirement Income Security Act fiduciaries’ ability to vote in favor of ESG shareholder proposals.<sup>32</sup> But ESG investing is a legitimate, value-seeking strategy that often outperforms traditional options.<sup>33</sup> Because the global systemic risk that climate change presents cannot be reduced through diversification alone, investors can vote on ESG shareholder proposals to secure their portfolios, and to signal optimal governance practices for managing climate risks throughout the market.<sup>34</sup>

Ultimately, however, the panelists agreed that there is no silver bullet for addressing and mitigating climate-related risks to the financial sector and the U.S. economy at large. Targeted policy interventions, comprehensive and standardized risk disclosures, and information-sharing across stakeholders in financial markets are all necessary to create incentives to push the country in the right direction.

## IV. Current State of Corporate Climate Disclosures and Applications

The day's third session was a panel discussion of corporate climate risk disclosures. First, Margaret Peloso of Vinson & Elkins addressed the legal considerations that inform companies' disclosure decisions, including materiality and issues raised by lack of standardization. Next, representatives from two firms, Sodexo and ConEd, presented on their companies' current efforts to disclose and address their climate risks.

### *Legal Considerations for Climate Risk Disclosure presented by Margaret Peloso of Vinson & Elkins LLP*

Peloso discussed the two central legal issues surrounding corporate climate disclosure: materiality and lack of standardization. First, with respect to materiality, firms are expected to disclose material (i.e. relevant or significant) factors bearing on their performance, and typically management dictates what is material. Investors expect that any risks a firm discloses changes the total mix of information available in a meaningful way. Furthermore, most firms are making projections about climate risks that assume there will be an organized, orderly transition to a decarbonized economy and that there are small negative climate impacts that will take place many decades in the future. So, the current perspective that some companies take means that most climate risks are not viewed as material.

What management deems material does not necessarily align with what investors think. Certain investors increasingly care about climate risks. These investors are putting pressure on companies to do a better job of reporting how different climate risks will affect their investments. Management does not always agree that this information needs to be included in financial reporting. This discontinuity creates a tension and means that companies must evaluate how they think about managing and reporting climate risk.

In 2010, the SEC issued guidance on companies' disclosure requirements as they relate to climate change.<sup>35</sup> Material issues can include: existing and forthcoming legislation and regulation; international agreements; indirect consequences of regulations or business trends; and physical impacts. The SEC did not prescribe a time horizon for what could constitute a material factor. Further, while this guidance is useful, it is nonbinding. Therefore, companies can largely continue to pick and choose what they disclose.

This raises the second legal issue, which is lack of standardization. The various voluntary reporting frameworks have very different conceptions of materiality. Lack of standardization means that it is challenging to compare disclosures between firms, across an entire industry, and across the economy. It also means that critical information may be missing. For example, most oil companies are not providing scenario analyses or stress testing in a way that shows climate risks as being material.

For those companies that choose to adhere to existing frameworks like CDP (formerly the Carbon Disclosure Project) or the TCFD, standardized reporting guidelines offer an opportunity for the company to demonstrate its relative success. However, there is still significant variation in the information companies choose to disclose. For example, two firms reporting under the TCFD may model different scenarios, use different time horizons, or use the same scenarios but

highlight different findings. So even with these frameworks, it is not necessarily easy to compare companies. Moreover, investors are increasingly concerned about the lack of consistency because it is difficult to determine if climate factors or ESG efforts are having an impact on corporate performance.

As companies and regulators continue to explore standardized disclosure requirements, Peloso noted a number of issues to keep in mind. First, standards will evolve over time and so companies have to plan ahead and anticipate what they might be obligated to do in the future. For example, Peloso noted that the Global Reporting Initiative is developing a sector-specific standard for the oil and gas industry, and that standard is going to require much more robust reporting of emissions than these companies have been doing up until this point.<sup>36</sup> Second, scenario analysis needs to be more transparent. That means that companies need to be prepared to share information about how they built their models, what type of information went into them, and their findings. Third, investors may have a different idea of what is material. Companies need to understand what their investors expect to see in their reports. Fourth, long-term stressors are increasingly important. Companies need to model not just short-run stress tests, but also long-term scenarios, so they can understand the dynamics between short- and long-term stressors.

Though standardized reporting requirements create obligations for firms, they also create opportunities. The transition to a low- or zero-carbon economy will take a huge amount of investment. Companies that communicate their story well will find themselves in a favorable position.

Lack of standardized and mandatory reporting means that both investors and companies are missing important data that could ultimately be material to their decisionmaking. Until there is such a requirement, however, companies will have to be creative in how they address their risks from or contributions to climate-related, environmental, and social problems. And stakeholders—not just shareholders—will have the opportunity to play an increasingly important role in corporate decisionmaking on these issues.

### *Case Studies presented by Kate Shearer of Sodexo and Nelson Yip of Con Edison*

#### Sodexo

Kate Shearer, Sodexo's Director of Sustainability, shared the company's strategy to reduce its greenhouse gas emissions and discussed the risks it faces from climate change.

Sodexo is a French food services and facilities management company. It is the 19th largest employer in the world, with approximately 500,000 employees worldwide, serving 13,000 facilities. Sodexo purchases \$17 billion worth of goods every year in North America alone. Because Sodexo is based in France, it has been obligated to report on ESG issues for nearly a decade. Sodexo's Better Tomorrow 2025 corporate responsibility and sustainability framework addresses how the company assesses and discloses its impact on individuals, communities, and the environment.<sup>37</sup>

As a part of these sustainability efforts, Sodexo has committed to reducing its carbon dioxide emissions by 34% from 2017 levels by the year 2025. This goal was validated by the Science Based Targets Initiative and aligns with the objective to limit global temperature rise to 1.5 degrees Celsius above pre-industrial levels.<sup>38</sup> To monitor and report on its emissions, Sodexo not only uses supply chain and enterprise-wide data, but it also surveys all of its physical sites and operational teams.

Nearly all (98%) of Sodexo's greenhouse gas emissions result from its supply chain. Reducing food waste is the highest impact action the company can take to reduce emissions. Sodexo has partnered with WasteWatch to help it achieve a goal of reducing food waste by 50%.<sup>39</sup> This data-driven strategy helps Sodexo's geographically-dispersed teams develop behavioral and operational changes to limit avoidable food waste.<sup>40</sup> Part of what brings transparency and drives progress around Sodexo's efforts to reduce food waste is that the company is capitalizing on its disclosure of this information to get preferential financial credit. For example, in 2019, Sodexo changed the mechanics of a \$1.3 billion revolving credit facility so that it now awards a pricing adjustment based on Sodexo's food waste performance.<sup>41</sup>

Sodexo's efforts to reduce food waste, and therefore reduce its carbon footprint, are affected by climate change. When supplies are affected by extreme climate events, Sodexo has to be able to mobilize quickly to figure out how to redistribute food that can no longer reach its intended destination. And though climate change does pose a real risk to Sodexo's food services, the company is fairly resilient in the face of climate risk because it has a broad product mix that enables it to pivot when faced with supply chain disruptions.

Sodexo's clients are major drivers of its efforts to manage and disclose emissions and climate risks. Sodexo understands that a failure to act on climate can be a client retention risk. Moreover, Sodexo's clients often have their own climate targets and expect Sodexo to contribute to meeting those goals.

## Con Edison

Nelson Yip, Director of Strategic Planning at ConEd, a utility company that provides electric, gas, and steam service throughout New York City and Westchester County, discussed the findings of ConEd's 2019 Climate Change Vulnerability Study. Like Sodexo, ConEd has to consider how to mitigate both its impact on climate change and the impact of climate change on its operations and customers.

The Climate Change Vulnerability Study looks at two emissions pathway scenarios, RCP 2.5 and a business-as-usual scenario, projecting out to the year 2080.<sup>42</sup> Using this lengthy time horizon enables ConEd to prepare for more severe climate-exacerbated events. The study shows that ConEd will need to invest between \$1.8 and \$5.2 billion to fortify its physical infrastructure so it can better withstand climate shocks. Yip emphasized that ConEd is proactively designing for resilience and adaptation, and considers future climate impacts on a daily basis.

The vulnerability study reviews historical and future climate change, the company's existing efforts to manage risks, and company- and sector-specific vulnerabilities. It also provides a roadmap for implementing climate adaptation measures. Because ConEd has such a large and diverse service territory, the company consulted with numerous stakeholders during the study to fill in gaps in its knowledge and understanding.

Yip noted that conducting the vulnerability study allowed ConEd to understand what climate change impacts threaten its service territory. ConEd worked with Columbia University's Center for Climate Change to determine what climate variables matter to its service and infrastructure. These variables include: increasing temperature, humidity, precipitation, flooding and sea-level rise, and the increasing frequency of extreme weather events. ConEd then ran stress tests based on these specific climate impacts to include in the study. The results allow ConEd to plan for potential future impacts on its physical assets, determine how to prioritize adaptation options, and assess the costs and benefits of different strategies.

ConEd is now preparing a Climate Change Implementation Plan that will lay out a governance structure and strategy for implementing adaptation measures over the next 20 years. In addition to using the information gathered in the 2019 vulnerability report, the implementation plan must consider the evolving electricity market and how consumers, policy, and sector trends may alter its services and infrastructure.

ConEd has been proactively engaging with the corporate governance officials of its top shareholders since 2011, in an effort to adopt sustainability best practices. ConEd also releases annual reports to showcase its sustainability efforts. In addition, ConEd is a member of industry trade groups that have mandatory disclosure obligations. Understanding financial exposure to climate risk helps ConEd and other companies in the industry disclose this information in a clear and consistent way.

ConEd is also affected by state and local policies. For example, with respect to New York's Climate Leadership and Community Protection Act, which sets ambitious decarbonization targets for the state, Yip said that ConEd is building on many of its existing strategies to transition to a "cleaner and greener" energy future. ConEd has been continually supported by state regulators and local leaders so it can be well-aligned to meet public policy goals.

## V. Policy Considerations for U.S. Federal Regulators with Robert Jackson

**F**ormer SEC Commissioner Robert Jackson shared his insights on the future of climate risk disclosure regulation in the United States and answered questions from the audience.

Jackson began by observing that policy decisions should be driven by the best possible evidence. Important conversations, like how and why companies should consider and disclose their climate risks, must be brought to bear on regulatory decisions. However, financial regulation does not yet reflect the evidence of climate-related risk.

According to Jackson, despite the imperfect state of corporate climate risk reporting, Jackson noted, the regulatory discourse about climate change is radically different than it was a decade ago. The so-called American boardroom no longer views investor calls for environmental transparency as fringe, but rather now understands them to be essential. There is a stated investment agenda for disclosure of corporate climate risk, including from some of the largest asset managers in the world, like BlackRock.

Investors are increasingly influencing how firms handle climate risk. Professor Madison Condon's paper, *Externalities and the Common Owner*, shows how the changing structure of ownership of American public companies provides an opportunity for reconsidering the degree to which investors can demand transparency on issues like the environmental impacts of corporate activity. This is now possible because so many companies have so many shares owned by the same few investors—the common owners—many of which have made clear their interest in greater transparency. This presents an opportunity for a systematic, investor-driven approach to mandatory reporting of climate-related risks, among other risk categories as well.

There have been calls to change U.S. corporate law so that corporate directors are not only obligated to their shareholders, but rather have more freedom to consider other constituencies and interests in the management of the corporation. The hope is that this change would lead to more desirable climate outcomes because there would be less of a focus on quarter-to-quarter earnings. However, Jackson said he believes that better ESG outcomes are not a given when corporations have more leeway. In other words, American boardrooms are not necessarily equipped to deliver on complex and profound social problems that require a multistakeholder solution. Such a change to the law could mean less accountability for managers in their decisionmaking. Therefore, any additional freedom or flexibility for managers needs to be accompanied by clear corporate commitments, including a promise to provide more transparency.

### Audience Question & Answers

After delivering initial remarks, Robert Jackson engaged in discussion with Professor Richard Revesz, director of the Institute for Policy Integrity at NYU School of Law, on a number of issues related to the future of regulating financial climate risk based on audience questions.

## *Are climate-friendly company commitments real?*

The trends towards more environmental transparency may be sincere, may be simple “greenwashing,” or may be attempts to deflect the focus of regulators. The only way to know is for these corporations to verify that their approaches have truly changed. There must be transparency.

There is also a concern about political opportunism as it relates to whether individual companies or coalitions go from being pro-transparency and pro-climate action to being against regulation and enforcement. The only way around the latter is to divorce politics from corporate money. It is difficult to imagine how such political-corporate entanglements could deliver socially optimal policy.

## *Can the SEC consider systemic risks?*

The Securities and Exchange Act of 1934<sup>43</sup> is expansive enough to include systematic considerations. In fact, the SEC has acted according to this reading before. In 2010, it issued a rule that required directors to consider financial system risks, including the extent to which those risks might affect the firm and its prospects, and then to disclose those risks and their implications for the economy. The SEC is in a position to provide information to the marketplace about risks that exist in that marketplace, regardless of whether some believe this type of activity is outside of its mandate to protect investors. If one supports free markets, one should want informed markets.

## *Should there be international coordination?*

International coordination is important not only for addressing systemic climate risks, but also for ensuring U.S. companies can remain competitive globally. For example, there was a question of whether U.S. investment firms would pay for research analyst reports<sup>44</sup> and the consensus ended up being that there was no harm done by continuing to not have this information. But, the European Commission passed the EU Markets in Financial Instruments Directive that required EU firms to solicit research analyst reports and so U.S. companies indirectly ended up paying for them. A continued failure to act on climate disclosure would allow Europe and other jurisdictions to “take the pen” and write the rules, which puts U.S. companies at a disadvantage.

## *What is the foreseeable near-term future of climate disclosure regulation?*

S-K regulations, prescribed under the U.S. Securities Act of 1933, are the rules that require the disclosure of risk factors for companies. They were recently revised, but those revisions did not include any new requirements with respect to climate risk disclosure. The rules will likely be updated again in the near future and those updates may include principles for how corporate management should approach climate risk disclosure, along with clear metrics for such reporting.

It is possible that a legal obligation exists for disclosures in annual 10-K filings given that many companies have adopted voluntary climate risk disclosure measures. But the companies asking questions about whether they have such a legal obligation are likely being well-counseled. The problem lies with the companies whose activity has significant climate impacts (and climate-related risk vulnerabilities) that are not being proactive and may be shopping around for legal advice that corresponds to a choice they have already made about what not to disclose. This is why the case for systematic securities regulation is so strong.

# Endnotes

- <sup>1</sup> VEENA RAMANI, CERES, ADDRESSING CLIMATE CHANGE AS A SYSTEMIC RISK (June 1, 2020), <https://www.ceres.org/accelerator/regulating-climate-financial-risk>; U.S. Billion-Dollar Weather and Climate Disasters, NAT'L OCEANIC & ATMOSPHERIC ADMIN, NAT'L CTRS. FOR ENV'T INFO. (2020), <https://www.ncdc.noaa.gov/billions/> (last visited Oct. 18, 2020).
- <sup>2</sup> Press Release, bp, From International Oil Company to Integrated Energy Company: bp Sets Out Strategy for Decade of Delivery Towards Net Zero Ambition (Aug. 4, 2020), <https://www.bp.com/en/global/corporate/news-and-insights/press-releases/from-international-oil-company-to-integrated-energy-company-bp-sets-out-strategy-for-decade-of-delivery-towards-net-zero-ambition.html>.
- <sup>3</sup> Press Release, Morgan Stanley, Morgan Stanley Announces Commitment to Reach Net-Zero Financed Emissions by 2050 (Sept. 21, 2020), <https://www.morganstanley.com/press-releases/morgan-stanley-announces-commitment-to-reach-net-zero-financed-e>.
- <sup>4</sup> See, e.g., Nick Sobczyk, Walmart, Morgan Stanley Announce Zero-Emissions Goals, E&E NEWS (Sept. 21, 2020), <https://www.eenews.net/greenwire/stories/1063714267> ("Morgan Stanley is the first major U.S. bank to pledge to net zero financed emissions by 2050, but it won't be the last," Environmental Defense Fund Senior Director Ben Ratner said in a statement. "Morgan Stanley's commitment is a clear sign to shareholders that it sees the commercial opportunity to shift capital to companies with net zero commitments, strategies and actions.").
- <sup>5</sup> See, e.g., Cecilia Keating, Morgan Stanley Targets 'Zero Financed Emissions' by 2050 in U.S. First, BUSINESSGREEN (Sept. 22, 2020), <https://www.businessgreen.com/news/4020511/morgan-stanley-targets-zero-financed-emissions-2050-us>; See also, Gillian Tett et al., Yellen and Carney Sound Alarm over Stranded Assets, FIN. TIMES (Oct. 9, 2020), <https://www.ft.com/content/d94e4bae-4ce6-4db2-9755-2d976de2892f> ("While top US and global banks have set clear commitments to achieve net-zero financed emissions by 2050, adopt world-leading standards for carbon accounting and disclosure, and cease financing fossil fuel companies that do not have Paris-compliant transition plans, JPM's announcement commits to none of those critical indicators," said Eli Kasargod-Staub, executive director of Majority Action.").
- <sup>6</sup> A video recording of the conference is available at <https://www.youtube.com/playlist?list=PL54Voe-jmsAqzSA-p8FHIBoyMeN60o0QC>.
- <sup>7</sup> This brief does not necessarily reflect the views of the Institute for Policy Integrity at NYU School of Law.
- <sup>8</sup> Tim McDonald, *Australia Fires: The Huge Economic Cost of Australia's Bushfires*, BBC NEWS (Dec. 20, 2019), <https://www.bbc.com/news/business-50862349>.
- <sup>9</sup> John Roach, *AccuWeather's 2019 Total Hurricane Damage Estimate Is \$22 billion*, ACCUWEATHER (Oct. 18, 2019, 3:04 PM), <https://www.accuweather.com/en/weather-news/accuweathers-2019-total-hurricane-damage-estimate-is-22-billion/604569>.
- <sup>10</sup> J.F. Mercure et al., *Macroeconomic Impact of Stranded Fossil Fuel Assets*, 8 NATURE CLIMATE CHANGE 588 (2018).
- <sup>11</sup> Institute for Policy Integrity, *Panel I: Assessing the Financial Risks of Climate Change*, YOUTUBE (Oct. 6, 2020) at 45:00-45:33, <https://www.youtube.com/watch?v=aJSfDd0PzPg> (Brigham McNaughton, Director of Sustainability Services, provides this statistic based on a study that PwC conducted.).
- <sup>12</sup> *Id.* at 33:15-33:30.
- <sup>13</sup> *Id.* at 29:17-29:49.
- <sup>14</sup> <https://www.bvdinfo.com/en-gb/>.
- <sup>15</sup> Task Force on Climate-Related Financial Disclosures, TCFD Supporters, <https://www.fsb-tcfd.org/tcfd-supporters/#:~:text=As%20of%20September%202020%2C%20support,added%20on%20a%20continuous%20basis.> (last visited Oct. 20, 2020).
- <sup>16</sup> Rhodium Group, Preliminary U.S. Emissions Estimates for 2018 (Jan. 8, 2019), <https://rhg.com/research/preliminary-us-emissions-estimates-for-2018/>.
- <sup>17</sup> MATTHIAS RUTH ET AL., CTR. FOR INTEGRATIVE ENV'T RSCH, THE US ECONOMIC IMPACTS OF CLIMATE CHANGE AND THE COSTS OF INACTION, (October 2007), <https://static1.squarespace.com/static/546d61b5e4b049f0b10b95c5/t/5500a26ae4b04ab48cb1ed85/1426104938597/US+Economic+Impacts+of+Climate+Change+and+the+Costs+of+Inaction.pdf> ("As the costs for doing business increase, competitiveness of individual firms, entire sectors or regions may decline. With this decline may come a loss of employment and overall economic security. As climate change affects jobs and household income in the United States, and as resources are increasingly diverted to help maintain safety and adequate supply of goods and services, national security may be weakened.").
- <sup>18</sup> RAMANI 2020, supra note 1.
- <sup>19</sup> *Id.* at x.

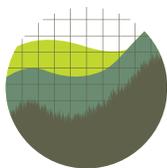
- <sup>20</sup> Joan DiSalvio & Nina Dorata, *SEC Guidance on Climate Change Risk Disclosures: An Assessment of Firm and Market Responses* in ACCOUNTING FOR THE ENVIRONMENT: MORE TALK AND LITTLE PROGRESS 115-30, 116 (Martin Freedman & Bikki Jaggi, eds., 2014).
- <sup>21</sup> ROSTIN BENHAM ET AL., CLIMATE-RELATED MARKET RISK SUBCOMM., MARKET RISK ADVISORY COMM. OF THE U.S. COMMODITY FUTURES TRADING COMM'N, MANAGING CLIMATE RISK IN THE U.S. FINANCIAL SYSTEM AT 98 (Sept. 9, 2020), available at <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>.
- <sup>22</sup> *Id.* at 99.
- <sup>23</sup> See generally, BENHAM ET AL. *supra* note 21.
- <sup>24</sup> BENHAM ET AL., *supra* note 21, at 35.
- <sup>25</sup> Institute for Policy Integrity, *Discussion with Robert Engle, Nathaniel Keohane, and Richard Berner*, YOUTUBE (Oct. 6, 2020) at 22:24-23:53, [https://www.youtube.com/watch?v=qO\\_UaValyWM](https://www.youtube.com/watch?v=qO_UaValyWM).
- <sup>26</sup> See PATRICK BOLTON ET AL., BANK FOR INT'L SETTLEMENTS, THE GREEN SWAN: CENTRAL BANKING AND FINANCIAL STABILITY IN THE AGE OF CLIMATE CHANGE (Jan. 2020) (a climate-driven financial crisis has a “key difference from an ordinary financial crisis, because the accumulation of atmosphere CO<sub>2</sub> beyond certain thresholds can lead to irreversible impacts, meaning that the biophysical causes of the crisis will be difficult if not impossible to undo at a later stage”).
- <sup>27</sup> BANK OF ENGLAND, TRANSITION IN THINKING: THE IMPACT OF CLIMATE CHANGE ON THE U.K. BANKING SECTOR (Sept. 26, 2018) (“Late, abrupt and significant policy action aimed at reducing greenhouse gas emissions would also significantly increase credit and market risks, particularly in carbon-intensive sectors.”); Bank of England, Prudential Regulation Committee, *The 2021 Biennial Exploratory Scenario on the Financial Risks from Climate Change*, (Bank of England discussion paper 20-12, 2019), <https://www.bankofengland.co.uk/-/media/boe/files/paper/2019/the-2021-biennial-exploratory-scenario-on-the-financial-risks-from-climate-change.pdf?la=en&hash=73D06B913C73472D0DF21F18DB71C2F454148C80>.
- <sup>28</sup> NETWORK FOR GREENING THE FIN. SYS., A CALL FOR ACTION: CLIMATE CHANGE AS A SOURCE OF FINANCIAL RISK (April 2019), [https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs\\_first\\_comprehensive\\_report\\_-\\_17042019\\_0.pdf](https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs_first_comprehensive_report_-_17042019_0.pdf).
- <sup>29</sup> Institute for Policy Integrity, *Discussion with Robert Engle, Nathaniel Keohane, and Richard Berner*, YOUTUBE (Oct. 6, 2020) at 39:45 – 40:28, [https://www.youtube.com/watch?v=qO\\_UaValyWM](https://www.youtube.com/watch?v=qO_UaValyWM).
- <sup>30</sup> See, e.g., Victoria Mills, Env't Defense Fund, Only Public Policy Can Deliver the Speed and Scale of Emissions Reductions Needed to Limit the Worst Impacts of Climate Change, (Feb. 3, 2020), <https://business.edf.org/insights/a-new-decade-demands-new-leadership-in-climate-policy-advocacy/>.
- <sup>31</sup> The proposed rule was finalized shortly after the conference. 85 Fed. Reg. 72,846 (Nov. 13, 2020). See also Avery Ellfeldt, *Labor Department Hinders ESG Investing Days Before Election*, E&E NEWS (Nov. 2, 2020), <https://www.eenews.net/climatewire/2020/11/02/stories/1063717541>.
- <sup>32</sup> Financial Factors in Selecting Plan Investments, 85 Fed. Reg. 39,113 (June 30, 2020).
- <sup>33</sup> Emily Steinbarth & Scott Bennett, *Materiality Matters: Targeting the ESG Issues that Impact Performance*, Harv. Corp. Gov. Forum (May 10, 2018), <https://corpgov.law.harvard.edu/2018/05/10/materiality-matters-targeting-the-esg-issues-that-impact-performance/>; Siobhan Riding, *Majority of ESG Funds Outperform Wider Market Over 10 Years*, FIN. TIMES (June 14, 2020), <https://www.ft.com/content/733ee6ff-446e-4f8b-86b2-19ef42da3824>.
- <sup>34</sup> Miguel A. Centeno et al., *The Emergence of Global Systemic Risk*, 41 ANN. REV. SOCIO. 65 (2015), <https://www.annualreviews.org/doi/pdf/10.1146/annurev-soc-073014-112317>.
- <sup>35</sup> Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6289 (Feb. 8, 2010).
- <sup>36</sup> See Global Sustainability Standards Board, GRI Sector Standard: Oil and Gas, Exposure Draft <https://www.globalreporting.org/standards/media/2630/og-exposure-draft.pdf>.
- <sup>37</sup> *Creating a Better Tomorrow 2020S*, SODEXO (last visited Oct. 28, 2020), <https://www.your-sodexo.com/my-company/better-tomorrow-2025/>.
- <sup>38</sup> *Reducing Our Environmental Impact*, SODEXO (last visited Oct. 28, 2020), <https://www.sodexo.com/home/positive-impact/sustainability/reducing-environmental-impact.html>.
- <sup>39</sup> *WasteWatch Powered by Leanpath*, SODEXO (last visited Oct. 28, 2020), <https://www.sodexo.com/positive-impact/sustainability/responsible-waste-reduction/waste-watch.html>.
- <sup>40</sup> Press Release, Sodexo, Sodexo steps up fight against food waste, aims to deploy data-driven program at 3,000 sites within year (May 13 2019), <https://www.sodexo.com/en/media/sodexo-against-food-waste.html>.
- <sup>41</sup> Institute for Policy Integrity, *Panel II: The Current State of Corporate Climate Disclosure and Applications*, YOUTUBE (Oct. 6, 2020) at 27:28 – 27:50, <https://www.youtube.com/watch?v=caxY0jIM0b8&t=83s>; see also Press Release, Sodexo, Sodexo: First Global Food Services Company to

Connect Its Financing to Action to Prevent Food Waste (Sept. 24, 2019), [https://www.sodexo.com/files/live/sites/com-wwd/files/02%20PDF/Press%20Releases/20190924\\_PR-Sodexo-Waste-Credit-Facility\\_EN.pdf](https://www.sodexo.com/files/live/sites/com-wwd/files/02%20PDF/Press%20Releases/20190924_PR-Sodexo-Waste-Credit-Facility_EN.pdf).

<sup>42</sup> CON EDISON, CLIMATE CHANGE VULNERABILITY STUDY (Dec. 2019), <https://www.ConEd.com/-/media/files/ConEd/documents/our-energy-future/our-energy-projects/climate-change-resiliency-plan/climate-change-vulnerability-study.pdf?la=en>.

<sup>43</sup> 15 U.S.C. §78a et seq.

<sup>44</sup> E.g., “substantive analysis that provides original investment specific insights.” CFA INSTITUTE, MIFID II: A NEW PARADIGM FOR INVESTMENT RESEARCH 5 (2017), [https://www.cfainstitute.org/-/media/documents/support/advocacy/mifid\\_ii\\_new-paradigm-for-research-report.ashx](https://www.cfainstitute.org/-/media/documents/support/advocacy/mifid_ii_new-paradigm-for-research-report.ashx).



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