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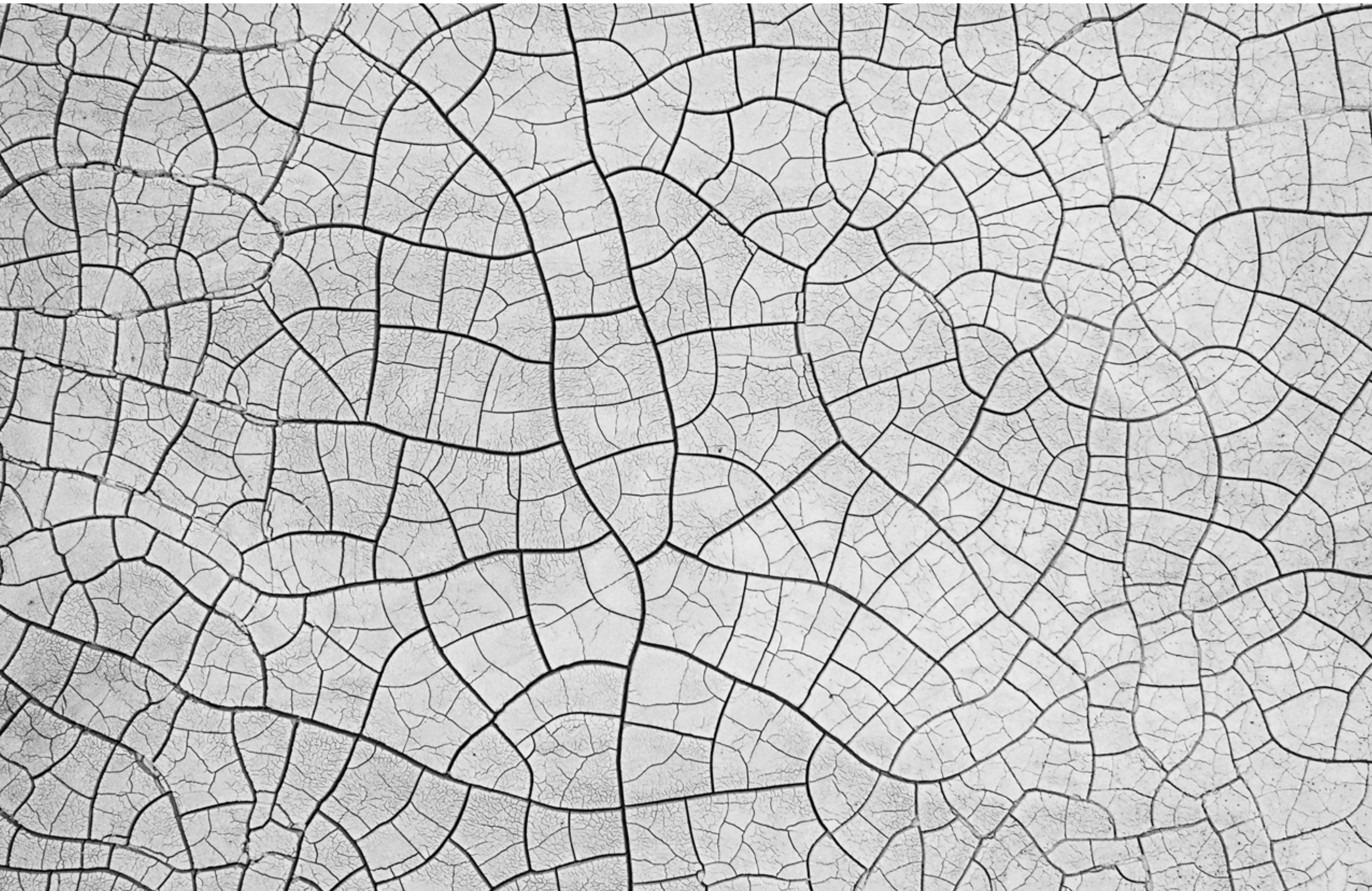
# EMERGING CLIMATE CHANGE RISK

## HOW A GLOBAL PANDEMIC AND THE BIDEN ADMINISTRATION BRING CLIMATE CHANGE RISK TO THE FOREFRONT OF THE US FINANCIAL REGULATION CONVERSATION



# INTRO

Among the many challenges facing financial institutions in 2020 was COVID-19's influence on the world's economy and monetary systems and the challenge of planning and solving for known and unknown risks. Amid this global pandemic, regulators and policymakers have been tasked with simultaneously solving current threats and trying to be proactive in protecting financial systems from concurrent or future threats. Climate change has come to the forefront of this conversation, with European regulators remaining steadfast in their path toward stricter climate risk mitigation requirements and U.S. regulators under a Biden Administration planning to take new steps toward a more hands-on approach.

For years now, countries in Europe have been leading the way to assess the risks of climate change for financial institutions and economies and create standards and practices to hold the financial industry accountable. But, just like a pandemic, climate change does not adhere to international boundaries, and it is becoming increasingly clear that U.S. and global regulators need to work together to find solutions. At a virtual panel discussion hosted by the Center for American Progress (CAP) on December 18, 2020, New York Department of Financial Services (NYDFS) Superintendent Linda Lacewell said meeting with European regulators gave the NYDFS "the confidence to move forward" with action on climate change. She added, "We all need to act. Otherwise, we will have tremendous gaps."

# GLOBAL RISK REQUIRES A GLOBAL RESPONSE

In 2015, a study from the Economist Intelligence Unit valued the risk of a warming climate on global manageable assets between $4.2 and $43 trillion by the year 2100, based on different levels of temperature change. This analysis suggests huge losses in the privately held pool of global assets and that "much of the impact on future assets will come through weaker growth and lower asset returns across the board." Financial institutions, therefore, must begin to consider these implications as the risks related to corporate governance and weak risk management in a changing climate become increasingly more apparent.

At the Paris climate conference (COP21) in December 2015, 195 countries adopted a global climate deal (2015 Paris Agreement), creating the first legally binding global action plan. This plan requires the parties to transition to a low-carbon global economy and to keep global warming below 2 degrees Celsius. The impacts of the physical and transition risks for different industries, including financial services, will continue to reveal themselves as these countries progress toward the Paris Agreement's objectives.

As part of the Paris Agreement, participating countries will track progress and report to each other and the public on how well they are implementing targets. The plan features a robust transparency and accountability system that requires governments to produce certain disclosures, meaning that firms in these countries, including financial institutions, have also begun to provide certain disclosures. Under former President Donald Trump, the U.S. pulled out of the agreement, but on his first day in office, President Joe Biden published his acceptance, on behalf of the U.S., of the Paris Agreement.

In addition to the Paris Agreement, some of the more recent highlights from international regulators are:

## European Union (EU)

- In December 2020, the European Commission (EC) launched the European Climate Pact, an EU-wide initiative inviting people, communities and organizations to participate in climate action and build a greener Europe as part of the European Green Deal.

- On November 27, 2020, the European Central Bank (ECB) published its final, amended guide on climate-related and environmental risks following a public consultation and a report on institutions' climate-related and environmental risk disclosures. The guide explains ECB expectations of banks to prudently manage and transparently disclose such risks under current prudential rules.

## United Kingdom (UK)

- On June 29, 2020, the Climate Financial Risk Forum (CFRF), co-chaired by the U.K.'s Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA), published a guide written by industry for industry to help firms approach and address climate-related financial risks. The guide, the first of its kind, provides practical recommendations to firms of all sizes on disclosure of climate-related financial risks, effective risk management, scenario analysis, and opportunities for innovation in consumers' interest. Regulators noted that they remain committed to working on this important topic especially while COVID-19 represents a present risk. At the CFRF's fifth meeting in November 2020, participants focused on data and metrics, as well as catering plans to the needs of smaller financial firms.

- At the end of November 2020, FCA Director of Strategy Richard Monks delivered a speech noting sustainability factors are increasingly influencing consumer decision-making. FCA is undertaking several initiatives to help address the identified concerns, including domestic and international work on issuers' disclosures and ongoing work with the government on implementing EU regulations.

## France

- On December 18, 2020, the French Prudential Control and Resolution Authority (ACPR) and the Financial Markets Authority (AMF) published a report of the system announced at the July 2, 2019 Place de Paris meeting, for monitoring and evaluating the commitments made by the Paris financial center (banks, insurers, management companies) in terms of climate. At this 2019 meeting, French financial institutions made a series of commitments in favor of the fight against climate change and the objective of carbon neutrality by 2050.

## Canada

- In November 2020, the Bank of Canada and Office of the Superintendent of Financial Institutions (OSFI) announced plans for a pilot project to use climate-change scenarios to better understand the risks to the financial system related to a transition to a low-carbon economy. A small group of institutions from the banking and insurance sectors will participate voluntarily in the project. Then, on December 11, 2020, OSFI superintendent Jeremy Rudin gave remarks to the Global Risk Institute on drawing on lessons from the COVID-19 pandemic to help chart the path on climate risk.

## Germany

- On September 22, 2020, Germany's BaFin published an expert article, "Making sustainability measurable," regarding the EU's recent establishment of a common classification system to offer investors incentives for sustainable investments (the Taxonomy Regulation). It was addressed to all financial market players, including banks and insurers.

### International Joint Bodies

- In April 2020, the Basel Committee on Banking Supervision (BCBS) published a stocktake report on its members' existing regulatory and supervisory initiatives on climate-related financial risks. The Committee's high-level Task Force prepared the report on Climate-related Financial Risks (TFCR).

- In March 2020, the Bank for International Settlements published a working paper exploring how central banks might expand the usual triad of objectives – liquidity, safety and return – to fit environmental sustainability considerations into their reserve management frameworks. This can be done either by explicitly articulating sustainability as a defined purpose of holding reserves, or implicitly as a supporting aspect of existing policy purposes.

- On November 23, 2020, the Financial Stability Board (FSB) published a report that examines the potential implications of climate change for financial stability. The report analyses how climate-related risks might be transmitted across, and might be amplified by, the financial system, including across borders. It also sets out next steps for the FSB's work in this area.

## AN INTERNATIONAL RESPONSE TO GLOBAL RISKS

In June 2017, the FSB' Task Force on Climate-related Financial Disclosures (TCFD) released recommendations to provide financial institutions with high-level guidance for assessing and disclosing climate-related risks and opportunities. These recommendations have served as a blueprint for many international regulators who urge their institutions to produce climate-related disclosures. TCFD assessed climate-related risks into two major categories:

1. Risks related to the **transition** to a lower-carbon economy, including:

   - **Policy and legal risk**: As policy and legal action around climate-related issues increases, so does the risk for financial institutions complying with policy change or being involved in legal repercussions.

   - **Technology risk**: As technology related to the transition to a lower-carbon system emerges, the competition between organizations could impact financial institutions.

   - **Market risk:** Shifts in supply and demand for certain commodities, products and services will impact how financial institutions interact with markets.

   - **Reputation risk**: As consumers become increasingly aware of climate-related issues, there could be risks in the public perception of an institution's involvement or non-involvement in the transition to a lower-carbon economy.

2. Risks related to the **physical impacts** of climate change, including:

   - **Acute risk**: There are some physical risks that are event-driven, such as intensified acuteness in weather events like cyclones, hurricanes, wildfires or floods.

   - **Chronic risk**: The longer-term changes in climate patterns (e.g., sustained higher temperatures) pose risks like sea-level rise or chronic heat waves.

Since the report has come out, many regulators and working groups have begun to accept a third type of climate change-related risk. **"Liability risk"** covers the potential consequences of third-party claims for damages caused by climate change. For property and casualty insurers, this risk could be particularly high. For financial institutions, the liability risk will come from insurers, investors, and governments who argue the financial institution knew, or should have known, about the risk from climate change and failed to plan and mitigate those risks.

Additionally, BCBS' TFCR is currently mapping transmission channels and studying the measurement methodologies of climate-related financial risks to the banking system. It has been confirmed that in 2021, they will use this analytical framework to develop recommendations for effective supervision to mitigate risks, taking into account possible incorporation into the existing Basel framework.

## THE INSURANCE INDUSTRY ASSESSES UNDERWRITING RISK

Italy's Institute for the Supervision of Insurance (IVASS) reported the European Insurance and Occupational Pensions Authority (EIOPA) published a discussion paper on a methodology for the potential inclusion of climate change in the Solvency II standard formula when calculating natural catastrophe underwriting risk and a discussion paper highlighting challenges associated with current non-life underwriting practices and options to ensure the availability and affordability of insurance products, in the context of climate change. Comments for both are due by February 26, 2021.

# WHAT TO DISCLOSE

The TCFD recommendations on climate-related financial disclosures, which apply to financial-sector organizations including banks, insurance companies, asset managers and asset owners, are based on assessing and managing climate-related risks. The recommendations are supposed to be adoptable by all organizations; included in financial filings; designed to solicit decision-useful, forward-looking information on financial impacts; and strongly focus on risks and opportunities related to a lower-carbon economy transition.

The TCFD defines the disclosures' core elements as:

- **Governance**: The organization's governance around climate-related risks and opportunities
- **Strategy**: The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning
- **Risk Management**: The processes used by the organization to identify, assess, and manage climate-related risks
- **Metrics and Targets**: The metrics and targets used to assess and manage relevant climate-related risks and opportunities

## HOW FIRMS DISCLOSE

On September 26, 2018, TCFD released a Status Report, which showed several important findings related to climate-related financial disclosures, including that areas of focus in these disclosures vary significantly. Non-financial companies reported information on their climate-related metrics and targets at a higher rate than financial companies, but financial companies more often discussed climate-related risks concerning enterprise risk management processes. Additionally, companies in Europe disclosed recommendation-aligned information at a higher percentage than companies in other regions.

# US REGULATORS TAKE STEPS TOWARD A MORE HANDS-ON APPROACH

As more and more global financial regulators start requiring disclosures in line with TCFD recommendations, and some begin to pilot programs to include climate change risks in modeling scenarios and stress testing, the U.S. lags behind Europe and Asia in preparing to address climate change in financial services regulation. But, in the last few months of 2020, we have seen several U.S. regulators take formal action to address the risks climate change poses, taking the lead from international counterparts:

- In the U.S. Senate confirmation hearing for Treasury Secretary nominee Janet Yellen, Yellen stated, “Climate change is an existential threat to not only our environment, but also our economy. President Biden has released a detailed plan to combat climate change, including rejoining the Paris Agreement, investing in sustainable infrastructure, and creating new green jobs. If confirmed, I will support him in implementing that plan at the Treasury.” As Treasury Secretary, Yellen would establish a hub to study tax policy and financial system risk from climate change.

- On December 15, 2020, the Federal Reserve Board (FRB) announced that it has formally joined the Network of Central Banks and Supervisors for Greening the Financial System (NGFS). By bringing together central banks and supervisory authorities from around the world, NGFS supports the exchange of ideas, research, and best practices on developing environment and climate risk management for the financial sector. FRB began participating in NGFS discussions and activities more than a year ago, but they are the first U.S. Federal regulator to join. NYSDFS was the first U.S. financial regulator to join in September 2019.

- In late November 2020, Insurance Commissioners of California and Washington State announced that eight insurance companies filed TCFD reports in response to the Climate Risk Disclosure Survey in 2020. Washington and California, in partnership with the Departments of Insurance from Connecticut, Minnesota, New Mexico, and New York, conducted the annual survey and release the results on the California Department of Insurance website. The Climate Risk Disclosure Survey is sent to insurance companies that generate $100 million or more in annual premium income and are licensed in the participating states, which in total encompasses over 70 percent of the U.S. insurance market.

- In September 2020, the Commodity Futures Trading Commission’s (CFTC) Climate-Related Market Risk Subcommittee of the Market Risk Advisory Committee (MRAC) published its report “Managing Climate Risk in the U.S. Financial System.” The report states, “The central message of this report is that U.S. financial regulators must recognize that climate change poses serious emerging risks to the U.S. financial system, and they should move urgently and decisively to measure, understand, and address these risks.” The report lists 53 recommendations to U.S. regulators to protect the U.S. financial system from climate change risks and highlights the need for climate change-related risk disclosures.

- On September 22, 2020, the NYDFS published a circular letter to outline DFS’s expectations for the industry and begin a dialogue about how DFS can best support institutions’ efforts to manage the financial risks from climate change. Additionally, NYDFS signed the U.N. Principles for Sustainable Insurance (PSI).

- In November 2020, The Federal Reserve Board (FRB) released its Financial Stability Report, which included climate change-related risks for the first time since the report's inception. In the section dedicated solely to this issue, the agency wrote, "Federal Reserve supervisors expect banks to have systems in place that appropriately identify, measure, control, and monitor all of their material risks, which for many banks are likely to extend to climate risks."
- On September 17, 2020, Securities and Exchange Commission (SEC) Commissioner Hester M. Peirce said funds must clearly disclose their investment strategies so that an investor can make informed decisions about whether a fund that claims to be an ESG fund is an ESG fund as that investor defines it.

# WHERE THE US IS HEADED

### 1. Required disclosures for climate-related risks

When we look at the trends in the U.S., it is clear that state and federal regulators are becoming more active in proposing and implementing regulations and policies to address the risk from climate change in and from the banking industry. Under a Biden Administration and legislation from a Democrat-controlled Congress, we can expect formal rulemaking. At the CAP panel discussion in December 2020, panelists agreed that the first step forward will be gathering more data, as this will be the cornerstone of understanding risks. FDIC Director Martin Gruenberg said, "We've got an enormous amount to learn in terms of understanding how climate change impacts financial risk. I think all of [the panelists] agree on the need for improved data, enhanced ability to analyze and evaluate that data." He went on, however, to caution that this process does not impede action: "At the same time, we don't want to put ourselves in the spot of delaying actually moving to address these risks… We as regulators need to provide guidance now, and institutions need to engage now."

### 2. Stress testing for systemically important institutions and key stakeholders

CFTC Commissioner Rostin Benham focused on the nuances of what the physical risks of climate change may mean for players in financial markets and shocks to overall systems. He noted that "the effects of climate change can be regional – forest fires on the West Coast, flooding in the Midwest in the agricultural heartland, hurricanes in the gulf coast. You have shocks to regional economies, lenders, borrowers, asset values, but what happens when, as we will experience in the future, you have compounding climate events in different regions, and how are those sub-systemic shocks raised to larger systemic shock across the entire financial system?"

This interconnectedness of markets is why regulators will be thinking about all aspects of climate change to create a comprehensive and effective path forward. It means continuing the path of joint efforts across jurisdictional boundaries and including multiple sub-systemic events in testing scenarios to ensure systems are strong enough to withstand the increase in sub-systemic, regional threats. After the Bank of England (BOE) announced it will stress test the resilience of the U.K.'s largest banks, insurers and the financial system to different climate pathways, regulators in France, Australia, Singapore, and the ECB announced their plans for climate stress tests.

### 3. Tailored requirements based on asset size and carbon footprint

Regulators have also made it clear that they will take a proportionate approach. NYDFS's Lacewell has said the agency "will not have the same expectations for small entities as one with a giant footprint." Several recent reports call for tiered requirements, and many regulators have said this will be the approach they will take.

### 4. More focus in certain states and on certain industries

Several states have been active in the conversation around climate change risk and we may see additional states move forward with their own initiatives. The insurance industry is already ahead of the banking industry in formal rulemakings, and there is already active guidance in several states for insurers to submit certain climate-related disclosures. NYDFS has notably been at the forefront, promising disclosure guidance for the financial services industry in 2021, and Washington State Insurance Commissioner Mike Kreidler has similar plans. However, Superintendent Lacewell has said that she does not want NYDFS to get too far ahead of federal regulation, and that the agency is in communication with federal regulators about a path forward.

### 5. Sustainable investments

European regulators have taken the lead when it comes to climate change risk mitigation through sustainable investing. At the beginning of 2020, the European Commission presented the European Green Deal Investment Plan, which will mobilize at least €1 trillion of sustainable investments over the next decade. It will enable a framework to facilitate public and private investments needed for the transition to a climate-neutral, green, competitive, and inclusive economy. In the near-term, while this level of investment from the U.S. government is not likely given other priorities such as funding a stimulus plan for addressing COVID-19, states and federal agencies under the Biden Administration will likely encourage private-sector investments and agency-specific support for sustainable investment.

California Governor Gavin Newsom announced that the Department of Finance has released the California Climate Investment Framework, which integrates the state's three largest pension funds' climate risk strategies into a statewide approach to sustainable investment going forward. Freddie Mac Multifamily announced it will soon go to market with a new impact series – Sustainability Bonds. The offering, dubbed K-SG, aims to attract capital to support economic mobility for residents and economic growth for communities, bolstering Multifamily's long history of supporting sustainable communities through its financing for affordable and workforce housing. Fannie Mae launched its Green Bond Program in April 2020, issuing 12 Single-Family Green MBS in 2020, which include only mortgage loans backed by newly constructed single-family residential homes with ENERGY STAR® certifications. These trends show us that regulators and legislators are placing value on sustainable investments, and there is a possibility that investments in areas deemed harmful to the climate will reflect negatively on an institution.

In Biden's "Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," issued the President's first day in office, Biden sets forth his administration's policy "to hold polluters accountable, including those who disproportionately harm communities of color and low-income communities." Furthermore, the order states that "it is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible establishes an Interagency Working Group on the Social Cost of Greenhouse Gases." Moving forward, there may be risks associated with investments in companies who rate poorly in these areas, especially as the Biden administration moves toward developing an economy-wide price on carbon.

### 6. Climate-related legislation that affects operations

State-level legislation and regulatory action toward a more sustainable future will affect institutions in ways that are not obvious at first. For example, California Governor Gavin Newsom issued an executive order requiring all new cars and passenger trucks sold in California to be zero-emission vehicles by 2035 and New York Governor Andrew Cuomo announced a package of clean transportation initiatives to advance New York's commitment to transition to cleaner mobility. Several states have requirements for certain buildings to meet green standards. These types of laws will require financial institutions to look at all aspects of operations to assess compliance and remain proactive in operational decisions like new office space or purchasing company-owned vehicles.

### 7. CRA credit for climate risk mitigation efforts and a focus on environmental racism

A long history of redlining and other practices has made it so that underserved communities are unduly burdened by the effects of climate change, such as poorer neighborhoods located in areas more prone to flooding. In the FRB's October 2020 Advance Notice of Proposed Rulemaking for the Community Reinvestment Act (CRA), the agency, for the first time, seeks feedback on providing CRA credit to encourage loans and investments that promote climate resilience in underserved and low-income communities.

NYDFS Superintendent Lacewell has said that the agency is currently studying whether it can give credit for action to mitigate climate change effects in underserved communities under its own CRA. CAP has published a report showing why addressing climate change and systemic environmental racism is an urgent matter and how policymakers can use the CRA to boost community investment to promote equitable climate resilience.

## MITIGATING CLIMATE CHANGE RISK: LESSONS LEARNED FROM THE COVID-19 PANDEMIC

Like the rest of the world, financial institutions were unprepared for the shocks of the COVID-19 pandemic. But, in looking at what we have learned about the risks in an unprecedented event, we can see some similarities and glean some lessons learned.

- International events do not care about international borders, even if the effects are differentiated by region. It will be imperative for regulators worldwide to work together to share information and best practices. This will need to be an ongoing, open conversation so that all parties are as best informed as possible. There is risk in global events and concurrent regional events, and we need to plan for both.
- Effects fall disproportionately on underserved populations, so we need to take the extra step to understand this and fight against inequality. We will need to look at how communities of color and low-income households are inordinately affected and what current practices worsen the situation. We will need to

discover ways for industry stakeholders to rectify the existing inequity and proactively solve for future exacerbation.

- We cannot wait to act because the issue contains certain elements of uncertainty. We were reactive to the pandemic and learned too late the steps we could have taken to plan for such an event. We need to be proactive about climate change, and work with the information we do have to stay ahead.

Regulators and institutions can support a green economy and mitigate global, local, and institution-specific risks. Climate change is an issue that promises to shift what is expected of institutions, and it is essential to begin planning now for how your institution will actively manage both regulatory and consumer expectations.

## IS YOUR INSTITUTION ACTIVELY MITIGATING THE RISKS ASSOCIATED WITH CLIMATE CHANGE ACROSS ALL BUSINESS LINES AND ASPECTS OF OPERATION?

Capco can help you assess your current gaps and find solutions that will scale with ongoing regulatory trends. Reach out to Peter Dugas and Leah Robinson to learn more.

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# ABOUT CAPCO

Capco is a global technology and management consultancy dedicated to the financial services industry. Our professionals combine innovative thinking with unrivalled industry knowledge to offer our clients consulting expertise, complex technology and package integration, transformation delivery, and managed services, to move their organizations forward.

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