



Climate Roadmap for U.S. Financial Regulation



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Introduction and Executive Summary

Climate financial reform must be a pillar of Biden’s whole-of-government approach to climate change.

The Biden Administration has taken office with an urgent climate mandate to act on climate and announced a “whole-of-government” approach in response.¹ Because climate change threatens our financial system and, indeed, entire economy, the United States needs to take action to prevent adverse economic impacts and protect our communities from its wide-ranging impacts. Financial regulators have a key role to play in this effort. Managing climate-related financial risk is essential not just for responding to the climate crisis, but also for tackling the current economic crisis and promoting long-term growth and financial stability. To date, U.S. financial regulators have done little regarding climate-related risks. In recent months, there have been many calls for regulators to address this oversight.²

Climate change has been called “the greatest market failure the world has ever seen.”³ There is widespread agreement that climate-related risk is underappreciated by financial actors and therefore is mispriced, likely to a degree that could threaten the stability of the financial system. Climate risks are complex, nonlinear, interconnected, and poorly understood. More than merely being underprepared, many actors across the financial system are exacerbating climate risks through their ongoing misallocation of capital.

Addressing climate risk is therefore a critically urgent task for financial regulators and one for which they have both the legal authority and the tools necessary to act. The question is not whether the government should take assertive action to reduce the massive risks posed by climate change on the financial system, investors, workers, and the economy, but rather how best to do so quickly, effectively, and sustainably. Regulators should use all tools at their disposal, including mandating disclosures, updating accounting standards, ensuring investor rights, modernizing fiduciary duties, and making use of their supervisory and prudential authorities.

To be clear, none of these actions requires new statutory authority. Congress has tasked financial regulators with maintaining the orderly, stable and efficient functioning of capital markets and the financial system in the interests of the public; regulators must exercise oversight of the risk posed by climate change, and the social, technological, and policy response to it, in order to carry out their existing obligations.

Addressing climate risk has become a critical part of the missions of financial regulators, and they have existing statutory obligations to act on it.

1 See Fact Sheet: President Biden Takes Executive Actions to Tackle the Climate Crisis at Home and Abroad, Create Jobs, and Restore Scientific Integrity Across Federal Government, Jan. 27, 2020, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/27/fact-sheet-president-biden-takes-executive-actions-to-tackle-the-climate-crisis-at-home-and-abroad-create-jobs-and-restore-scientific-integrity-across-federal-government/>.

2 See, e.g., Graham Steele, *A Regulatory Green Light: How Dodd-Frank Can Address Wall Street’s Role in the Climate Crisis*, The Great Democracy Initiative, Jan. 2020, https://greatdemocracyinitiative.org/wp-content/uploads/2020/01/Final_Greenlight_Steele.pdf; *Managing Climate Risk in the U.S. Financial System*, Report for the Climate-Related Market Risk Subcommittee, Market Risk Advisory Committee of the U.S. Commodity Futures Trading Commission, Sept. 9, 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>; *Addressing Climate as a Systemic Risk*, The Ceres Accelerator for Sustainable Capital Markets, June 1, 2020, <https://www.ceres.org/resources/reports/addressing-climate-systemic-risk>; *Preventing a Climate Crash*, Evergreen Collaborative, Oct. 2020, <https://collaborative.evergreenaction.com/policy-hub/ClimateCrash.pdf>.

3 Nicholas Stern, Cabinet Office - HM Treasury, *The Economics of Climate Change: The Stern Review*, 2007, viii.

Appropriate climate financial reforms, once undertaken, will in turn cause firms to price risk more appropriately and to allocate capital more prudently, improving the economy’s climate resilience and shifting capital out of high-carbon activities that pose undue risk in a decarbonizing economy. In the long run, these impacts will also improve the health of markets, the economy, and society.

This report, prepared with the input of dozens of experts, provides a detailed “playbook” for financial regulators to integrate climate risk into their oversight responsibilities. It is organized in three broad parts: the first focuses on personnel, staffing, and agency organization across the U.S. financial regulatory system; the second on supervision and prudential regulation; and the third on capital markets regulation. These recommendations were prepared in the lead-up to the Biden Administration taking office and were shared during the transition process.

Leadership starts at the top.

Leadership begins with President Biden: He has the power to manage climate risk and avert economic crisis by prioritizing climate financial reform across all federal financial regulators. President Biden should rescind and replace Executive Order 13,772, by which the Trump administration established a set of deregulatory and corrosive Core Principles for Regulating the United States Financial System. Biden’s new order should clearly state that climate-related risk is central to financial regulators’ missions, and it should set forth how financial regulatory agencies should work together to protect our economy and the public from the grave economic impacts of climate change. This report’s overarching recommendations, which should be reflected in any new executive order on the topic, are outlined below:

Leadership begins with President Biden: He has the power to manage climate risk and avert economic crisis by prioritizing climate financial reform across all federal financial regulators.

- Firms should not be allowed to hide activities that are exposed to or contribute to climate risks. Regulators should require more accurate, comparable, standardized, and decision-useful climate-related disclosures for use by themselves, investors, and financial institutions.
- Once climate risks are disclosed, investors must be able to act on that information. Regulators should protect and expand investor and fiduciary rights to manage climate risk. Regulators must implement policies on corporate governance and fiduciary duties that permit investors and fiduciaries to act on climate and other sustainability information, so that they may manage climate risk and adopt sustainable investment practices.
- Disclosure and investor empowerment are not enough, and regulators must use their authority to limit climate-related risks as they do other types of risk. Regulators should make substantive prudential regulation a core pillar of the response to climate-related financial risks. Regulators must act with urgency, reflecting the risks posed by climate change. Evidence is abundant; they need not wait for more or better-refined data or analysis before taking prudent actions that can be supported with the information that is currently available. They should
 - a. use their supervisory powers and engage in prudential regulation to mitigate climate-related threats to individual financial institutions and financial stability, working quickly to implement prudential measures with respect to assets and activities with the clearest, most direct, and largest exposures to climate risk;
 - b. develop macroprudential tools to address climate threats to the financial system, including the ways that individual financial institutions contribute to climate change through carbon financing.
- While regulators must act urgently given the abundance of existing evidence, they should also simultaneously support and expand research on climate change’s effects on financial risk and the functioning of the market. The need for further research is not an excuse for inaction, but it is also urgent. Regulators should expand their research capacity to analyze and quantify climate change’s effects on macroprudential and microprudential financial risk and on the orderly functioning of the market. This research will allow regulators to update and calibrate rules or guidance as more comprehensive or refined assessments of climate risk become available.

- Regulators must also protect marginalized communities from being harmed by efforts to mitigate climate-related risk. Climate risk mitigation should not raise the cost of financial services or render them unavailable to frontline communities. Regulators should seek and welcome opportunities to incentivize safe, clean investments in frontline communities and more generally, but they must proceed with caution. They must ensure that these asset classes are actually green in environmental terms and safe as a matter of consumer protection and financial stability.

The U.S. Department of the Treasury (the Treasury) should play a leading and coordinating role on both policy and research because it chairs the Financial Stability Oversight Council (FSOC) and the Office of Financial Research (OFR). Because many of the relevant authorities are independent agencies, coordination by the Treasury cannot take the place of climate change capacity building and engagement within those agencies. Carrying out climate change priorities will require capacity and sustained action and monitoring from all federal entities with financial regulatory authority: the Treasury, FSOC, and OFR, the Board of Governors of the Federal Reserve System (the Federal Reserve, the Board, or the Fed), the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), and the National Credit Union Administration (NCUA), the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC), and the Department of Labor (DOL).

Climate-related financial reform is one of three intersecting reforms.

Financial reforms that address climate risk are urgent and central to financial regulation in their own right and should not and cannot effectively be addressed in isolation from other financial reforms. The recommendations of the report therefore emphasize two additional interdependent and intersecting issues:

- **Financial regulators must ensure that the financial costs of climate change do not fall on low-income communities and communities of color, and that financial reforms benefit these communities.** Climate change is disproportionately harming low-income communities and communities of color, and regulators must take care to aid these communities and avoid compounding the harm to them. Policymakers must squarely address the distributional, equity, and racial justice dimensions of the metastasizing climate catastrophe. Communities of color and low-income or low-wealth, indigenous, rural, and rustbelt communities are more likely to be impacted by floods, storms, drought, food and water insecurity, increased diseases, faltering infrastructure, increased violence, and most other climate harms. These same communities often have the fewest economic resources with which to respond. Policymakers must work to ensure that financial regulatory responses help communities victimized by economic marginalization and racial discrimination survive and thrive in the transition to a low-carbon economy by encouraging green investment in these communities, creating jobs with family-sustaining wages and benefits, and preventing unintended harm from public or private risk-mitigation measures.
- **Regulators must combat regulatory arbitrage and rein in shadow finance.** In the last three decades, financial services have increasingly migrated to less regulated spaces. The complexity of modern finance means that regulators must address not only lending, but also capital-markets financing mechanisms, many of which are currently outside any meaningful regulatory oversight. In securities, capital has flowed away from SEC registered offerings to exempt offerings and from public markets to private ones. Private equity, hedge funds and other private funds have enjoyed meteoric growth. At the same time, the shadow banking system—a constellation of less regulated capital markets, products, and intermediaries ranging from asset-backed securities to repo to money market mutual funds—has come to dwarf the traditional depository banking system. For climate financial regulation to be effective, policymakers must extend rules to private offerings of securities while simultaneously reversing decades of capital migration to less regulated, darker corners of the financial universe.

Financial regulators must ensure that the financial costs of climate change do not fall on low-income communities and communities of color, and that financial reforms benefit these communities.



Summary of key technical recommendations

Part I: Personnel, Staffing and Agency Organization

A. Appoint Climate Champions.

The President should continue to identify and select nominees and appointments for Federal banking and financial stability agencies who have demonstrated their (1) understanding of the ways that climate change creates systemic risk, (2) awareness of the relevant agency's mandate to mitigate that risk and (3) commitment to that mandate.

- The President should use these criteria for all political appointments, but the top priorities are principals and deputies for the Treasury Department, the Federal Reserve, the OFR, OCC, FDIC, NCUA, SEC and the CFTC. **[Rec. I.A.1]**
- The Administration should commit to having an executive-level climate champion at each of these agencies in addition to a champion at the principal level. **[Rec. I.A.3]**

B. Establish Offices of Climate Risk.

The Fed, FDIC, OCC, NCUA, OFR, SEC, CFTC, and NCUA should each establish an office of climate risk or other unit dedicated to climate-related risk and regulation. Guided by the FSOC's federal climate finance strategy (Rec. II.A.2), these offices should (1) work together to establish a coordinated response to integrate climate risks and opportunities into financial regulation and (2) work within their respective agencies to implement interagency plans as well as integrate climate risk into other relevant agency work.

- The new offices would be tasked with a broad range of responsibilities for identifying opportunities for action, participating in the development of climate-related policies, and coordinating with other federal financial regulators, international regulators, White House climate and economic advisors, federal climate science agencies, and environmental regulators. **[Rec. I.B.1, 3-4]**
- The new offices should report directly to the chairperson, comptroller, or other principal of the agency to ensure that the office has the clout needed to do its job effectively. **[Rec. I.B.2]**

Part II: Supervision and Prudential Regulation

A. Emphasize That Climate Risk Is a Central Concern of Financial Regulation.

Financial regulators should immediately and publicly recognize climate change as a systemic risk and demonstrate their commitment to incorporating that risk into financial regulation.

- The President should request that the OCC, FDIC, and NCUA follow the Federal Reserve Board's lead and join the Network for Greening the Financial System. **[Rec. II.A.1]**
- The Secretary of the Treasury should immediately convene the FSOC to chart a strategy for reducing climate change risk. **[Rec. II.A.2]**
- The Secretary of the Treasury and the heads of the Board, OCC, and FDIC should also emphasize to the heads of the largest banks through both formal and informal channels that climate will be a focus and a priority. **[Rec. II.A.3]**

B. Build the Capacity of Financial Regulators to Address Climate Risk.

The regulators should take steps to better understand the scope of climate risk that threatens the financial system. Improved reporting and partnership with international regulators will quickly build a base of data and capabilities that will speed up future actions.

- The banking regulators should incorporate climate risk into their call reports as well as into the annual Financial Stability Report published by the Board and the FSOC. **[Rec. II.B.1, 2]**
- Treasury, the Board and the SEC should also collaborate with regulators in other countries through the Financial Stability Board (FSB). **[Rec. II.B.3]**
- The banking regulators should engage in exercises with international prudential regulators to map out the cross-border contagion effects of climate risk. **[Rec. II.B.4]**

C. Incorporate Climate Risk into Supervision and Disclosure.

The Federal Reserve Board, OCC, FDIC, and NCUA should issue new supervisory guidance directing examiners to consider climate-related risks in the supervisory and examination processes. This guidance should include consideration of credit, market, liquidity, strategic, and operational risks to financial institutions arising from climate change. In crafting supervisory guidance on climate-related risks, regulators should bear in mind the differing characteristics of physical and transition risks. **[Rec. II.C.1]**

D. Incorporate Climate Risk into Major Safety and Soundness Tools.

Regulators, led by the Federal Reserve Board, should recognize that climate risk could threaten the solvency of banks. To address this danger, climate risk should factor into stress tests, new scenario analyses, GSIB surcharges, and capital requirements. This effort should occur in three stages.

- Regulators, beginning with the Federal Reserve, should incorporate climate risk into their periodic stress tests. Regulators should also develop scenario analysis exercises as a complement to stress tests. **[Rec. II.D.1]**
- The Federal Reserve should impose a climate-risk surcharge on global systemically important banks (GSIBs) to reflect the additional systemic climate risk that the largest banks face and pose. **[Rec. II.D.2]**
- The Federal Reserve, OCC, and FDIC should create risk weights for capital requirements to reflect the additional risk of direct or indirect investments in carbon-intensive assets and assets exposed to heightened physical risks. **[Rec. II.D.3]**

E. Prohibit Direct Fossil Fuel Holdings by Banks.

Today, loopholes permit bank holding companies to directly own fossil fuel assets. Banks could use their nonfinancial business to help them manipulate markets and profit by either increasing costs for ordinary Americans or trading off of their market positions. At the same time, pipelines breaking, oil spills, and refinery explosions expose banks to significant legal and financial liability.

- The Treasury Secretary, OCC, and Federal Reserve Board should issue new interpretative guidance and new rules and orders to limit the ability of bank holding companies/financial holding companies to invest in physical commodities and engage in merchant banking activities. **[Rec. II.E.1]**
- The Board should also monitor attempts by banks to directly operate oil and gas assets they have seized from borrowers and use supervisory discretion to require banks to sell or otherwise dispose of these assets. **[Rec. II.E.2]**

F. Incorporate Climate Risk into the Full Supervision and Prudential Regulation Toolkit.

Given the magnitude of the threat from climate change, regulators should aim to incorporate climate risk into every tool at their disposal.

- Regulators should incorporate climate risk into the supervisory ratings they assign to banks. **[Rec. II.F.1]**
- They should incorporate the risk that financial institutions face from having their critical infrastructure located in geographic locations with significant exposure to flooding, to hurricanes and other storms, and to wildfire-induced power outages. **[Rec. II.F.2]**
- Regulators can tighten the limits for exposures to segments of the fossil fuel industry given the long-term decline and volatility in the sector. **[Rec. II.F.3]**
- The FDIC can adjust deposit insurance premiums to reflect climate-related risks to banks. **[Rec. II.F.4]**
- Regulators should use Dodd-Frank authorities to incorporate climate risk into nonbank SIFI designation and regulation and to include climate risk in a reinvigorated Volcker Rule. **[Rec. II.F.5]**

G. Incorporate Climate Risk into CFTC Prudential Regulation.

As the composition of market participants continues to shift away from publicly traded companies toward privately held ones, regulators like the CFTC that govern the architecture of market structures increase in importance. The CFTC can pursue several needed actions without new congressional authority.

- The CFTC should adjust capital and margin requirements to ensure firms and markets most exposed to climate risk are adequately protected. **[Rec. II.G.4–5]**
- To ensure capital and margin requirements are adequate, the CFTC should also incorporate climate risk into supervisory stress tests. **[Rec. II.F.6]**
- The CFTC should initiate rulemaking to set speculation limits that curb or stop financial institutions from speculating (and investing) in fossil-fuel commodities. **[Rec. II.F.7]**

H. Engage the Federal Insurance Office in Changing the Insurance Industry's Behavior.

The Federal Insurance Office (FIO) lacks direct regulatory authority over insurers, as they are regulated at the state level. But the FIO can use its congressionally provided authority to influence the insurance industry's behavior.

- The FIO should collect data about climate risks and exposures for insurers and the insurance market and make that data publicly available. **[Rec. II.H.1]**
- The FIO should also research, analyze and report on the threats that climate risk poses to insurers and the industry and on the ways that insurers contribute to the climate crisis. **[Rec. II.H.3]**
- The FIO should also work with and advise the FSOC, state regulators, and international bodies on addressing the climate risks facing the insurance industry. **[Rec. II.H.2, 4–6]**

I. Address Climate Risk in the Fed’s Emergency Lending Facilities.

Climate change is and will continue to be damaging to the Fed’s balance sheet. Because the Federal Reserve’s emergency lending facilities failed to factor in climate risks (as does the market overall), they failed to ensure a sustainable portfolio that protects public investment. Moreover, the Federal Reserve’s portfolio is overweight in oil and gas, violating its commitment to market neutrality.

- The Board should strongly consider reducing or removing oil and gas positions in the near term, rather than holding them through the term of the bonds purchased as part of the CARES Act credit facilities. **[Rec. II.I.1]**
- In any future market interventions, the Treasury Secretary should work with the Board to ensure they protect workers and the general public, do not contribute to financial instability, ameliorate rather than exacerbate the climate crisis, and do not foster moral hazard by rewarding reckless conduct by financial institutions or the managers of other large businesses. **[Rec. II.I.2–7]**

Part III: Capital Markets Regulation

A. Build Climate Capacity at the SEC.

To mitigate growing climate risks in the public markets, the SEC needs to build its climate capacity and staffing.

- The SEC must start by establishing climate teams in the Division of Corporate Finance, the Division of Investment Management, and the OCIE as well as by creating a climate risk advisory committee. **[Rec. III.A.2, 4, 6–7]**
- The SEC should ensure that each advisory committee has at least one ESG expert. **[Rec. III.A.8]**
- The SEC should engage international groups working in this space, including the IASB, IOSCO and NGFS. **[Rec. III.A.2, 9–10]**

B. Require Climate-Related Disclosures.

A robust public disclosure regime is an essential first step in maintaining a system of accountability for companies operating businesses or marketing their securities, helping society properly allocate capital that drives our economy. In the absence of adequate disclosure about companies’ operations, investors and the public cannot meaningfully identify and assess the impact of the operations or take action to influence them.

- To protect investors, the SEC must develop and enforce a mandatory, science-driven climate disclosure framework for financial and nonfinancial institutions. **[Rec. III.B.1–4, 9–11]**
- The SEC should work with PCAOB to develop expectations for disclosure assurability and completeness as well as reviews of critical audit matters related to climate change. **[Rec. III.B.5–6]**
- The SEC should develop standardized definitions and criteria for ESG and sustainable funds and registered investment companies. **[Rec. III.B.7–8]**
- The DOL should require that money managers that manage ERISA assets disclose their ESG risks and risk mitigation strategy. **[Rec. III.B.12]**

C. Advance Shareholder Rights.

Investors must have the ability to make use of information on climate risks—and ESG factors generally—when making their investment and voting decisions. The Trump Administration worked to dramatically curtail investors’ abilities to engage with companies, vote, and otherwise exercise their rights of ownership. Shareholder information and voting rights are of particular importance for investors who are already integrating ESG factors into their investment decisions, and these rights must be restored and expanded.

- The SEC and DOL must ensure that shareholders are reasonably able to raise ESG-related proposals and use proxy advisory firms to exercise their right to vote. **[Rec. III.C.1–6, 8–9, 12–13]**
- The SEC and DOL should require that investment advisors take customers’ climate policy preferences into account in their investment actions, including fund selection and voting of shares. **[Rec. III.C.7, 11]**

D. Modernize Expectations for Investment Fiduciaries.

For ESG disclosures to be effective in changing the behavior of investors and businesses, regulations must be updated first to make clear that ESG factors are material investment considerations and then to establish a framework to ensure that fiduciaries are acting on those factors. SEC and DOL regulations should allow fiduciaries to respond to ESG factors in the ways they deem appropriate—for example, through buying or selling of assets, engagement with issuers, and filing of shareholder proposals.

- The SEC should require investment advisors to adopt and implement sustainable investment policies, to learn their customers’ sustainability preferences, and to disclose in prospectuses how they address ESG issues. **[Rec. III.D.1–5]**
- The DOL should clarify that ESG factors are “pecuniary” and should adopt a rule requiring that ERISA fiduciaries implement a sustainable investment policy. **[Rec. III.D.6–9]**

E. Increase Reporting for Private Companies and Funds.

Both Congress and the SEC have repeatedly created and expanded rules that permit companies to access the capital markets from a large pool of investors without having to register their securities offerings. These rules have profound implications for corporate accountability to shareholders and other stakeholders, including the public. The public disclosure obligations and rights for shareholders demanded by the federal securities laws and rules generally apply only to “public” companies and “registered” investment companies.

- Federal securities laws and rules should be revised to ensure that all large companies and funds make essential disclosures, including disclosures of ESG risks and opportunities. **[Rec. III.E]**

F. Incorporate Material Climate Information into Accounting Standards.

The current U.S. accounting and disclosure regime ignores material climate information that is critical to investors’ capital allocation, investment monitoring, and stewardship.

- The SEC should begin retooling the accounting and disclosure regime immediately. It could do so simply by enforcing existing accounting, disclosure, and audit rules to address pervasive material omissions in disclosures. **[Rec. III.F.1]**
- The SEC should consider new rulemaking to outline appropriate procedures to audit and report on climate emissions. **[Rec. III.F.2–3, 6–7]**
- The PCAOB should propose and adopt new auditing standards related to new 10k climate-related disclosures. **[Rec. III.F.4]**

G. Address Climate Risk in Municipal Securities.

Even before the pandemic, funding for state and local governments was under extreme stress, and many governments are looking to sell long-dated debt. At the same time, the communities these governments serve face several climate risks from vulnerability to natural disasters and the transition of their economies and power grids to meet science-based climate targets.

- The SEC should propose and adopt rules to require evaluation of climate financial risks for municipal securities. **[Rec. III.G.1]**
- The SEC should convene a roundtable with the Municipal Securities Rulemaking Board, municipal issuers, insurance companies, and investors to evaluate various disclosure content and formats. **[Rec. III.G.2]**
- The Fed should consider creating new facilities like the Municipal Lending Facility to facilitate the climate transition. **[Rec. III.G.3]**

H. Adopt Rules Governing Products and Services Offered as “Green.”

Green bonds have taken off. According to Goldman Sachs, \$225 billion were issued in 2019 compared with \$10 billion in 2013, their first year. The rise in these creative financing methods for green initiatives is to be applauded, but concerns have also been growing over whether some bonds are being falsely advertised, a practice often referred to as “greenwashing.” There are still no exact criteria for what constitutes a “green” bond, nor is there an official third party providing any sort of certification.

- The SEC should propose and adopt rules to require standardized climate risk disclosures and performance that constitute “sustainable” or “ESG” branding and “green bonds.” **[Rec H.1–8]**

I. Require Rating Agencies to Incorporate Climate Considerations into Credit Ratings and to Publish Their Methodologies.

Credit rating firms serve as important intermediaries in the debt markets, purportedly providing standardized grades on a debt reflecting its riskiness to investors. Currently, however, credit rating methodologies related to climate and other exposures are typically too vague to be used as a basis for a credit rating. Credit ratings firms often inflate initial ratings, which may persist until an event triggers a massive reconciliation, usually in the form of a downgrade. The “issuer pays” model is a structural issue contributing to this problem, as ratings firms have an incentive to compete for business by providing higher ratings.

- Congress should amend the law to require rating agencies to adopt, integrate, and publish policies on how they consider climate change in their ratings of different securities as a condition of their registrations. **[Rec. III.I.1]**
- The SEC should deny applications for registration to rate new classes of non-credit securities under 17 CFR § 240.17g-1 if it determines that the credit rating agency has ever issued ESG ratings for any class of securities that were arbitrary or misleading or lacked a comprehensive methodology. **[Rec. III.I.2]**
- Congress should establish a public credit rating agency to establish robust climate-related scenarios.

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Part I: Personnel, Staffing and Agency Organization

A. Appoint Climate Champions.

The President should continue to identify and select personnel for Federal banking and financial stability agencies who have demonstrated their (1) understanding of the ways that climate change creates systemic risk, (2) awareness of the relevant agency's mandate to mitigate that risk, and (3) commitment to that mandate.

1. These criteria should apply to all political appointments, but the top priorities are principals and deputies for the Treasury Department, the Fed, the OFR, the OCC, the FDIC, the NCUA, the SEC and the CFTC.
 - a. Critical principal-level appointments in addition to the Secretary of the Treasury are the Comptroller of the Currency and the Governors of the Board.
 - b. As of this writing, there is one open seat on the Board.
 - c. The President will have the ability to appoint 3 of 5 members of the FDIC Board if Jelena McWilliams and Martin Gruenberg remain in their posts: the vacant Vice Chair, the CFPB Director and the Comptroller of the Currency. If McWilliams or Gruenberg leave, the President can appoint their replacements. No more than three members may be from the same political party.
 - d. The next head of the OFR must be committed to studying climate-related threats to financial stability and must have a capacious view of the office's mandate.
2. The Biden Administration should commit to having a climate champion at each of these agencies at an executive level (equivalent in rank to a Treasury Assistant Secretary or Deputy Assistant Secretary) in addition to a champion at the principal level.
3. The SEC Chair should select as directors of the divisions of Corporation Finance and Investment Management candidates who have experience with shareholder rights and with reviewing and utilizing corporate disclosures. These candidates are likely to include investment officers, portfolio managers, research analysts, stewardship directors, and other executives of institutional investors.

B. Establish Offices of Climate Risk.

The Fed, FDIC, OCC, NCUA, OFR, SEC, CFTC, and NCUA should each establish an Office of Climate Risk or other unit dedicated to climate-related risk and regulation. These offices must effectively fulfill inward- and outward-looking missions. Guided by FSOC's strategy for climate-related financial regulation and supervision (Rec. II.A.2), and in consultation with federal climate scientists and environmental regulators, these offices should (1) work together to establish a coordinated response for integrating climate risks and opportunities into financial regulation and (2) work within their respective agencies to implement interagency plans as well as integrate climate risk into other relevant agency work.

1. The new offices should be tasked with
 - a. gathering data;
 - b. identifying opportunities for an agency to use its mandates to reduce climate-related risk and promote equitable, clean finance;
 - c. participating in the development of agency-wide climate-related policies and rules;
 - d. coordinating efforts on climate change risk with other federal financial regulators, the White House climate and economic advisors, the Environmental Protection Agency, the Department of Energy, the Department of Labor, the Department of State, the Department of Homeland Security, the Department of Defense, the Federal Emergency Management Agency, the Federal Housing Finance Agency, the Department of Transportation, the

Department of Agriculture, the Department of the Interior, and other federal entities involved in the national climate response;

- e. liaising with prudential regulators in other countries and with intergovernmental bodies involved in financial regulation and climate change; and
 - f. reaching out to the climate science community, including climate scientists and advisors at the Environmental Protection Agency, the National Oceanographic and Atmospheric Administration, the National Aeronautics and Space Administration, and the National Science Foundation.
2. The new offices should report directly to the principal of the agency to ensure that they have the clout needed to do their jobs effectively.
 3. Congress should ultimately codify these new offices in statute.
 4. Any delays in creating these new offices should not slow the other actions recommended in this report.

Note: Each agency should also, as appropriate, establish climate-focused teams within its operating units, create climate advisory committees, and revise its procedures to ensure that climate risk is fully integrated into decision-making processes. Specific recommendations appear where appropriate for each agency.

Financial regulatory agencies should each establish an Office of Climate Risk or other unit dedicated to climate-related risk and regulation. These offices should work together to establish a coordinated response for integrating climate risks and opportunities into financial regulation and work within their respective agencies to implement interagency plans on climate issues.

Part II: Supervision and Prudential Regulation

Agencies: This section concerns the Treasury, the Fed, FSOC, OFR, OCC, FDIC, and NCUA.⁴

A. Emphasize the Central Role of Climate Risk to Financial Regulation.

1. **Join the Network for Greening the Financial System.** The President should request that the OCC, FDIC, and NCUA follow the Federal Reserve Board's lead and join the Network for Greening the Financial System as members, not just observers. This action would signal the Administration's commitment to using financial regulation to address the systemic risk stemming from climate change. It would also facilitate knowledge transfer and allow the progress of U.S. regulators to be measured against that of their international counterparts.
2. **Convene the FSOC to Chart Strategy for Reducing Climate Change Risk.** After addressing pandemic-related threats to financial stability, addressing climate change risk should be the next highest priority for convening the FSOC. These two threats each merit a separate meeting of the FSOC. FSOC recommendations on reducing systemic risk to the financial sector would complement the President's broader agenda for addressing climate change. The Treasury Secretary should convene a special meeting of the FSOC with the following goals:
 - a. Underscore the Administration's past and continuing commitments to address the risks of climate change to the financial system. The Administration's overall climate change agenda has implications for the financial system and financial institutions. The Administration must actively reduce climate-related threats to financial stability and ensure that concerns with financial stability do not provide a stumbling block for comprehensive climate action across the government.
 - b. Map the data that needs to be collected to support regulation to reduce these risks.
 - c. Begin developing coordinated strategies and cooperation among agencies to integrate climate change into their work, including the following:
 - i. gathering and sharing data on risks to financial institutions and sectors;
 - ii. improving financial institutions' disclosure of
 1. their exposure to climate change risk, including exposure via financed emissions, in line with best available methodology such as that created by the Partnership for Carbon Accounting Financials, and
 2. their transition plans and targets for risk reduction, including reduction of risks from financed emissions and engagement with sectoral decarbonization strategies; and
 - iii. creating interagency working groups (including the new climate change offices or units described in section I.B).
 - d. Charter a new FSOC committee devoted to climate-related risk that would coordinate and catalyze these actions.
 - e. Create an FSOC advisory committee on climate-related risk.
 - i. The Advisory Committee would include climate experts and financial stability specialists.
 - ii. The Advisory Committee should
 1. publicly report on efforts by FSOC member agencies to address climate-related risks and
 2. issue recommendations to the FSOC or member agencies on additional ways to improve the resilience of the financial system to climate-related risks.

⁴ The President can direct the Treasury Secretary and the OFR to take actions. The Fed, FDIC, and NCUA are independent agencies, which means that the President can request but not direct that they take actions. The Treasury Secretary can direct the OCC to take actions on matters other than on adjudications or actions that prevent or delay regulations. The FSOC is a group of the heads of multiple federal banking and capital markets agencies (most of which are independent) as well as of several other voting and non-voting members. The Treasury Secretary chairs the FSOC and can convene it to coordinate discussion and actions by its members.

- f. Commit to using the FSOC to share data and analysis on climate-related risks with the OFR, regulatory agencies, and Treasury.
 - i. FSOC member agencies might detail staff to the OFR to aid in the data collection, sharing, and analysis processes.
 - ii. The OFR might be directed to establish a working group on financial regulatory economic analysis with the EPA, NIST, and other experts.
- g. Begin planning “war games” to help regulators plan for major financial market disruptions stemming from climate-related risk.
- h. Commit to incorporating enhanced activities to reduce climate-related risk into the FSOC’s annual budget, which is prepared by September.

After this initial meeting or series of meetings, Treasury and the FSOC should play an ongoing coordinating role regarding climate change in financial regulation.

- 3. **Emphasize to the Heads of the Largest Banks That Climate Will Be a Focus and a Priority.** The Secretary of the Treasury should immediately hold a meeting with the largest banks to announce a new policy and emphasis: The banks must focus on reducing their climate-related risks expeditiously, they cannot expect government intervention to support them when climate risk manifests, and climate considerations will be integrated into their supervision and examinations. The Secretary and the heads of the banking regulators should make clear that the regulators’ concern is not just credit risk, but all relevant climate-related risks, including credit, liquidity, strategic, operation, market, and reputational risk. The leadership of the Fed, the OCC, and the FDIC should continuously impress these points on the management of the largest banks using formal and informal channels.

B. Build the Capacity of Financial Regulators to Address Climate Risk.

- 1. **Include Climate Disclosures in Call Reports.** Climate-related quantitative and qualitative disclosure should be included in the periodic “call reports” that banks are required to file with regulators. The Federal Financial Institutions Examination Council (FFIEC) should ensure that these reports include
 - a. exposure from loan/investments with a high degree of climate-related risk, including physical and transition risk with particular emphasis on exposure to the fossil fuel industry and fossil-fuel-fired power plants (or emissions-intensive sectors reliant on a fossil-fuel-based economy), given the greater and more direct climate-related risks that these investments pose to banks, and
 - b. the duration of those loans/investments, including detailed reports for loans/investments with a term of 3 or more years, given their enhanced risk.
- 2. **Incorporate Climate Change Risk into Financial Stability Reports.** The Federal Reserve Board recently discussed climate risk for the first time in its Financial Stability Report. Future reports should include an extensive, more comprehensive discussion of the threats that climate change poses to the U.S. and global financial systems and to individual financial institutions and markets.
 - a. Both the FSOC and the OFR should include an extensive discussion of climate-related risk in their respective annual reports.
- 3. **Engage on Financial Stability Monitoring with the Financial Stability Board (FSB).** The FSB, an international coordinating body, has been examining the financial stability implications of climate change. The Treasury Department, the Fed, and the SEC should work with the FSB to develop a consistent international framework for implementing the mandatory risk disclosures and for integrating climate-related risk into supervision and prudential regulation.
- 4. **Conduct Cross-Border Exercises.** The Treasury Department, the Fed, and the FDIC should coordinate with foreign counterparts to conduct cross-border exercises with the Bank of England, the European Central Bank, the Bank of Japan, and others to map out climate-related risk with cross-border contagion effects.

C. Incorporate Climate Risk into Supervision and Disclosure.

1. **Issue Supervisory Standards on Climate-Related Risk.** The Fed, the OCC, the FDIC, and the NCUA should issue new supervisory guidance directing examiners to consider climate-related risks in the supervisory and examination processes. This effort could be accomplished via FFIEC examination standards.
 - a. This guidance should include consideration of credit, market, liquidity, strategic, and operational risks to financial institutions arising from climate change. In crafting supervisory guidance on climate-related risks, regulators should bear in mind the differing characteristics of physical and transition risk.
 - i. Physical risk is unavoidable; the acute and chronic physical harms from climate change will increase over the next few decades. A certain amount of additional warming, and therefore climate chaos, is already “baked in” because of carbon that has already been released into the atmosphere. At the same time, the more quickly and sharply we reduce carbon pollution, the sooner the physical risks will stop increasing.
 - ii. Transition risk can and should be mitigated with immediate steps to reduce existing and emerging risks on bank balance sheets (as well as off-balance sheet risks). Regulators should move banks toward an orderly transition away from risky emission-intensive assets while also requiring them to prepare for the possibility of acute shocks.
 - b. Exposure of banks’ real estate assets to correlated losses from climate risk should be a particular emphasis.
 - c. The President should direct the Secretary of the Treasury and the OCC to issue new guidance and rules on climate-related risk and request that the Fed, FDIC, and NCUA join them. FFIEC can serve as a valuable convenor.
 - d. The guidance should be followed by notice and comment rulemaking by these agencies to solidify the new supervisory standards and to ensure that they can impact capital adequacy determinations, risk premia for deposit insurance, and other regulatory remedies.
 - e. To preserve the ability of regulators to use supervision and guidance as critical regulatory tools, the Administration should
 - i. reverse the [2018 guidance](#) by financial regulators (the Board, FDIC, NCUA, and OCC) that sought to limit their own ability to use supervisory guidance and
 - ii. terminate rulemakings that seek to codify this “guidance on guidance” and hamstring financial regulators (see the [October 2020 proposed rule](#) issued by Treasury, the Board, the NCUA and CFPB).
2. **Cooperate with SEC Industry Guide Disclosure Revisions.** Federal bank regulators should cooperate with the SEC as that agency revises its Industry Guide 3 to require greater disclosure from bank holding companies of climate change-related risks. (This memo suggests revisions to SEC Industry Guide 3 in section III.B.)
 - a. Bank regulators should further cooperate as the SEC revises other industry guides (including Guide 4 for Oil & Gas Companies, Guide 5 for Real Estate Limited Partnerships, and Guide 6 for Property-Casualty Insurance Underwriters).
 - b. Disclosures in all of these other industry guides would allow bank regulators and investors to
 - i. verify information by comparing SEC filings with banks’ regulatory filings, and
 - ii. obtain a more complete picture of climate risk in financial markets and the adequacy of plans to mitigate that risk.
 - c. The CFTC should be engaged in coordination of disclosure and regulation.

D. Incorporate Climate Risk into Major Safety and Soundness Tools.

Climate risk should factor into stress tests, new scenario analyses, GSIB surcharges, and capital requirements. This effort should occur in three stages. Stage 1 (stress testing and scenario planning) would provide the planning and data to support surcharges (Stage 2) and capital requirements (Stage 3). Regulators should not wait for completion of Stage 1 to begin laying the groundwork for surcharges and capital requirements that reflect climate risk. The Federal Reserve Board should lead regulators by incorporating climate risk into its stress testing, GSIB surcharges, and capital requirements and by developing scenario analyses, recognizing that climate risk could threaten the solvency of banks. Other regulators should build climate risk into their Dodd-Frank stress tests and develop scenario planning exercises.

1. **Stage 1: Stress Tests and Scenario Planning Exercises.** Regulators, beginning with the Federal Reserve, should incorporate climate risk into their periodic stress tests. Regulators should also develop scenario planning exercises as a complement to stress tests.
 - a. **Stress Tests.** The Federal Reserve Board should develop new standalone climate-related stress tests that probe the resiliency of banks in the face of both physical and transition risks. Both the banks and the Board should conduct the tests. The OCC should also incorporate climate-related risk into its stress tests (which would not apply to community banks) and require them to be conducted by the banks as well. The OCC should also work with bank boards of directors to develop scenario analyses. Climate risk should ultimately be included in all Dodd-Frank required stress tests, but it is important to focus first on the largest, most complex financial institutions.

Climate-related scenarios should not impede the Board or the OCC from stress testing based on other scenarios. Stress test results would affect the CCAR process.

- i. The tests would prompt financial institutions to begin planning for managing risk from climate-related catastrophes and from the transition to a low-carbon economy.
 - ii. The tests would generate data and create “connective tissue” among prudential regulators, macroeconomists, and climate scientists. This cooperation among regulators would generate better modeling, data, and practices to improve later stages of climate-related capital regulation and to insulate that regulation from attack by conservative judges.
 - iii. Stage 1 can begin immediately; it would not require calibration of risk weights according to certain assets.
- b. **Scenario Planning Exercises.** The Federal Reserve (and ultimately other bank regulators) should prioritize a scenario planning exercise for the U.S. banking system and individual banks along the lines of the [NGFS scenario planning exercise](#) and the [scenario planning exercise](#) performed by the Bank of England.

Such a scenario planning exercise applies a variety of climate risk scenarios, including specific policy change scenarios, to current bank balance sheets and business models, over a long horizon (the Bank of England exercise covered 30 to 60 years).

Scenario planning exercises could allow regulators to gather data and prompt more public and private sector planning even if stress tests for a given year focus mainly on non-climate risks such as a pandemic.

The scenario planning exercise should

- i. be based on detailed scenarios specific to U.S. policy goals and targets and reflective of specific U.S. carbon-intensive economic activities,
- ii. assume that current balance sheets and business models represent a “steady state” over the time horizon and ask how they would have to change to accommodate scenarios, and
- iii. stress not just balance sheet items, but also revenue generation practices (e.g., underwriting, structuring, prime brokerage, or sales) that may not typically result in assets held on balance sheets but that do rely on clients or sales involving carbon-intensive industries.

Scenario planning exercises would not necessarily affect capital requirements. However, they would inform regulator supervision of banks and internal bank planning. On the basis of results from these exercises, regulators should exercise their supervisory powers to require that banks do the following to ensure their safety and soundness:

- iv. develop tools and models to measure and assess climate risks emerging from their activities,
- v. integrate such tools and models into their risk management activities, and
- vi. change risk management and risk appetite policies appropriately.

Initial scenario planning exercises should focus on the largest, most complex banks that have capital market activities. When the exercises are extended to a broader range of banks, they will adapt to differing levels of risks, kinds of activities, and balance sheet sizes and compositions.

Results of scenario planning exercises should be checked for quality by supervisors, who should ensure results are integrated into risk management practices on an ongoing basis. Where appropriate, supervisors should engage with banks on planning for divestment of assets or termination of activities on the basis of results from scenario planning exercises.

2. **Stage 2: Climate Risk Surcharges.** The Federal Reserve should impose a climate-risk surcharge on global systemically important banks (GSIBs).
 - a. This surcharge would reflect the additional systemic climate risk that the largest banks face and pose. An additional capital surcharge would require banks to internalize the future costs they are placing on other financial institutions and to bolster the resilience of the banking system to these heightened risks. The surcharge would address
 - i. credit, liquidity, market, and operational risks related to the physical risk from climate change and
 - ii. those same risks arising from stranded assets as the economy transitions away from emission-intensive energy.
 - b. The Federal Reserve and the OFR should begin collecting data and building models to set appropriate surcharges and support their reasoning in preparation for industry groups' inevitable litigation.
 - c. The Biden Administration might request additional legislation from Congress to clarify the statutory authority for climate-related surcharges and to mandate them.
3. **Stage 3: Capital Requirements.** The Federal Reserve, OCC, and FDIC should create risk weights for capital requirements to reflect the additional risk of direct or indirect investments in carbon-intensive assets and assets exposed to heightened physical risks. Stage Three would have a more calibrated approach than Stage Two and would be directed toward the riskiness of specific assets on a bank's balance sheet. By contrast, the surcharge is aimed at reducing the systemic risk that banks create when they exacerbate the climate crisis by financing fossil fuels. These weights can and should escalate over time as both physical and transition risks to banks increase and, potentially, climate risk modeling becomes more precise. Longer-duration bank loans to businesses facing climate risk require particular attention (and the duration of these loans should be a critical focal point for call reports and disclosure, as described in Section II.B).
 - a. The Federal Reserve Board, together with the OFR and the OCC, should develop methodologies to assign risk-based capital weights to assets on the basis of climate-based risk. This effort would set the stage for notice-and-comment rulemaking and legislation to create risk-based capital weights that reflect climate risk.
 - b. The Federal Reserve Board should prioritize risk-based capital weights for investments in the most carbon-intensive assets that pose the greatest and most direct climate-related risk to bank solvency—for example, coal, arctic and deepwater oil extraction, and much fossil gas production. This focus would yield immediate results while a more comprehensive capital weight system linked to carbon accounting is developed.

E. Prohibit Direct Fossil Fuel Holdings by Banks.

1. **Limit the Ability of Bank Holding Companies to Invest in Physical Commodities and Energy Businesses.** The Treasury Secretary, OCC, and Federal Reserve Board should issue new interpretative guidance and new rules and orders to limit the ability of bank holding companies and financial holding companies to invest in physical commodities and engage in merchant banking activities.
 - a. The President should
 - i. request that the Federal Reserve Board issue new guidance and rules and sunset existing orders that expanded bank powers to invest in physical commodities and merchant banking businesses and
 - ii. direct the Secretary of the Treasury and the OCC to join in these actions as necessary.
 - b. The guidance, rules, and orders would narrow
 - i. the concepts of what constitutes the “business of banking” and activities “complementary” to a financial activity for financial holding companies and
 - ii. the “Merchant Banking Rule,” which applies to financial holding companies.
 - c. Rules proposed by the Federal Reserve Board in 2016 could be revived for accelerated action.
 - d. The guidance, rules, and orders would force financial holding companies to exit risky physical commodities and merchant banking businesses.
 - e. Guidance and rules could begin by excluding fossil fuel commodities and merchant banking investments.
 - f. These agency actions should be followed by legislation that cements these changes. Legislation would include repeal of
 - i. provisions of the Bank Holding Company Act (12 U.S.C. § 1843(k)(4)(H) and (I)) that authorize merchant banking investments and insurance company portfolio investments and
 - ii. the special statutory provision (12 U.S.C. § 1843(o)) that grandfathers commodities investments by Goldman Sachs and Morgan Stanley.
2. **Ensure the Board Monitors Attempts by Banks to Directly Operate Oil and Gas.** The law that repealed the Depression-era Glass-Steagall Act gives banks the right to seize a borrower’s assets and hold them for as long as a decade. Banks concerned about oil and gas loans souring are reportedly considering taking possession of the companies that they have lent to and operating them until they can recover some economic value.
 - a. The first danger of this arrangement is that banks could use their nonfinancial business to help them manipulate markets and profit by either increasing costs for ordinary Americans or trading off their market positions.
 - b. The second danger is catastrophic financial risk. Broken pipelines, oil spills, and refinery explosions expose banks to significant legal and financial liability.
 - c. The fossil fuel industry is also exacerbating a climate crisis that is likely to have systemic consequences for the financial system, the economy, and, most importantly, our communities.
 - d. Market, operational, and other risks increase for a bank the longer that it holds oil and gas assets. Holding these assets for a significant period not only poses “carbon lock-in” problems, but also potentially exacerbates an asset/liability mismatch.

The Board doesn’t have approval authority over the initial acquisition, but it can use supervisory discretion to require banks to sell or otherwise dispose of oil and gas businesses, and it should do so.

F. Incorporate Climate Risk into the Full Supervision and Prudential Regulation Toolkit.

1. **Implement Rulemaking for Supervisory Ratings.** The supervisory standards discussed in section II.C are intended to be quickly implementable.
 - a. At the same time, the Federal Reserve should begin notice and comment rulemaking to incorporate climate risk into its Large Financial Institution (LFI) Rating System.
 - b. Regulators should also begin rulemaking to make climate risk either a separate factor in the CAMELS (Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity) ratings or to articulate how climate risk affects *each* of these six factors.
 - i. Either approach must ensure that climate risk is not discounted. The former approach would prevent climate risk from being siloed into the existing CAMELS elements and thus undercounted.
 - ii. Changes to CAMELS ratings to address climate risk should focus on the largest banks. Because these banks have the most complex activities and balance sheets, they merit a nuanced approach to supervision that explicitly takes into account climate risk.
2. **Incorporate Consideration of Geographic Location Risk.** Bank regulators' supervision and rulemaking should incorporate consideration of the risk that financial institutions face from having their critical infrastructure (including offices and data processing) located in geographic locations with significant exposure to flooding, hurricanes and other storms, and wildfire-induced power outages. These risks will be exacerbated by climate change. Regulatory actions should
 - a. reflect geographic location risk in stress testing (under 12 U.S.C. § 5365(i)) for both large bank holding companies and nonbank systemically important financial institutions and
 - b. include supervision of banks and bank holding companies for unsafe and unsound banking practices (under 12 U.S.C. § 1818(b)) and 12 C.F.R. Part 364).
3. **Set Concentration Limits for Exposure to the Fossil Fuel Sector.** Prudential bank regulators should set concentration limits for exposure to segments of the fossil fuel industry, given long-term decline and volatility in the sector.
 - a. Lending and other investments that create excessive risk exposure should be treated as an unsafe or unsound banking practice (under 12 CFR Part 364) that would trigger administrative enforcement.
 - b. Experiences from savings and loan and bank losses to the energy sector in the 1980s should inform concentration limits.

Concentration limits for large banking entities are particularly important because the poor performance of the fossil-fuel energy sector creates additional risks for these entities, which own \$200 billion worth of energy-sector debt.⁵ Wells Fargo's portfolio of loans to energy companies is so distressed that it was described in April 2020 as a "bloodbath."⁶ Concentration limits might later be extended to other sectors heavily exposed to climate risk.

4. **Adjust Deposit Insurance Premiums.** The Federal Deposit Insurance Corporation Improvement Act mandates that the agency set higher premiums based on higher risks faced by banks. The President should request that the FDIC consider adjusting deposit insurance premiums to reflect climate-related risks to banks.
 - a. Incorporating climate risk into deposit insurance premiums means that supervision and supervisory ratings must incorporate climate-related risks to bank solvency.
 - b. A phased incorporation of climate risk should focus on the largest banks with capital markets activities, not on community banks.

⁵ David French and Imani Moise, "Exclusive: U.S. Banks Prepare to Seize Energy Assets as Shale Boom Goes Bust," Reuters, Apr. 9, 2020, <https://www.reuters.com/article/us-usa-banks-energy-assets-exclusive/exclusive-u-s-banks-prepare-to-seize-energy-assets-as-shale-boom-goes-bust-idUSKCN21R3JL>.

⁶ David French and Imani Moise, "Exclusive: Wells Fargo Shifts Energy Bankers to Focus on Bankruptcies," Reuters, Apr. 30, 2020, <https://www.reuters.com/article/us-wells-fargo-energy-bad-loans-exclusive/exclusive-wells-fargo-shifts-energy-bankers-to-focus-on-bankruptcies-idUSKBN22C3J6>.

5. **Incorporate Climate Risk into Nonbank SIFI Regulation.** The FSOC should incorporate systemic risk arising from climate change into its rules and process for designating nonbanks as systemically important financial institutions.
 - a. The FSOC should update its guidance on nonbank designations to include climate risk as part of its analytic framework for statutory considerations.
 - b. It should move quickly to consider SIFI designations for nonbank financial institutions whose high-emissions activities (when combined with their other activities) create systemic risk or otherwise contribute to designation criteria in the Dodd-Frank Act. It should give particular consideration to entities that have significant loans or investments in the companies or sectors that are most acutely vulnerable to transition risk.
 - c. The Federal Reserve should include climate risk factors in its stress testing of nonbank SIFIs under its jurisdiction (12 U.S.C. § 5365(i)).
 - d. The Federal Reserve should include climate risk in its Dodd-Frank § 165 rules for enhanced supervision and prudential regulation of designated nonbank SIFIs. These rules need to be made more robust and might include
 - i. additional capital weights for climate risk,
 - ii. enhanced supervisory standards of the type discussed above for banks,
 - iii. concentration limits or oversight of investment portfolios, and
 - iv. stress testing and scenario planning for climate-related risks.
 - e. The Federal Reserve should finally issue the early remediation rules under Dodd-Frank § 166 (12 U.S.C. § 5366) to address the financial distress of bank holding companies and designated nonbank SIFIs under its jurisdiction. These rules should incorporate requirements to reduce climate-related factors that exacerbate the likelihood and severity of financial distress, such as a sharp devaluation of emission-intensive assets.
 - f. Incorporating climate risk into nonbank SIFI designation and regulation might be included in a reintroduction of the Systemic Risk Mitigation Act of 2020. That legislation would make SIFI designation of certain large nonbanks automatic.
6. **Reinvigorate the Volcker Rule.** As part of rewriting a more robust Volcker Rule, the SEC, CFTC, Federal Reserve, OCC, and FDIC should incorporate into proprietary trading and covered fund restrictions requirements that banks
 - a. ascertain the climate risk of investments structured to fall within exceptions to the Volcker Rule prohibitions, including exposure to the fossil fuel industry and coal- or gas-fired power plants, and
 - b. disclose to regulators and the public details of the exposure.

In particular, banks should ascertain and disclose their managed funds' indirect climate-risk exposure, including to the fossil fuel industry and oil- or gas-fired power plants.

G. Incorporate Climate Risk into CFTC Prudential Regulation.

The U.S. Commodity Futures Trading Commission (CFTC) has important roles to play on climate change. As the composition of market participants continues to shift away from publicly traded companies toward privately held ones, regulators like the CFTC that govern the architecture of market structures increase in importance.

The CFTC can pursue several needed actions without new congressional authority, including adjusting capital and margin requirements to reflect climate risk, incorporating climate risk into supervisory stress tests, and requiring jurisdictional entities to disclose information on climate risk. (Note that this report contains a few additional recommendations for the CFTC in section III.D.)

1. **Join the Network for Greening the Financial System (NGFS).** For the reasons discussed in section II.A, the CFTC should join the NGFS as a member.
2. **Integrate Climate Risk into Agency-Wide Research and Monitoring.** The Chair should direct all divisions of the agency to work with the newly established Office of Climate Risk to undertake research and publications aimed

at understanding how climate-related risks are impacting and could impact the stability and proper functioning of markets and market participants under CFTC oversight, including central counterparties, futures commission merchants, commodity pool operators, and speculative traders and specific investment vehicles.

3. **Compel Market Participants to Disclose Climate Risk-Related Data.** A challenge facing regulators seeking to account for climate risk is the dearth of climate-related disclosures by key market participants. This absence of uniform environmental, social, and governance (ESG) reporting obscures climate risk. The Commission has the authority to compel all market participants to report quantitative and qualitative data on climate risks, with certain of this information then shared with the public.
4. **Initiate Rulemaking to Incorporate Climate Risk into Capital Requirements.** Capital requirements are currently designed to ensure that major market participants are not too highly leveraged by imposing a ratio of a firm's assets in relation to its liabilities. Climate risk increases exposure, but climate liabilities are currently not reflected in today's capital requirements. Enhancing a firm's capital requirements would mean those firms with more exposure to climate risk—say, financial firms that feature significant loan or swap exposure to fossil fuel companies or commodities that are particularly vulnerable to physical climate risk—would have to operate with an increased cost of capital. This increased cost will both serve to protect firms' stability and diminish firms' incentive to engage in activities that are characterized by or contribute to climate risk.

Capital requirements should apply to swaps dealers, major swaps participants, derivative clearing organizations, designated contract markets, and central counterparties (which include the exchanges). The risk weights should be recalibrated frequently, given growing physical and climate risk and increasingly sophisticated and granular climate science.

5. **Initiate Rulemaking to Incorporate Climate Risk into Margin Requirements.** The Commission should adjust margin requirements to reflect climate risk. The purpose of these requirements is to protect counterparties and exchanges in the event that derivatives bets go sour by keeping sufficient cash on the table, keeping trading platforms solvent, and preventing contagion. Even when effective capital requirements are established, margin requirements are necessary to ensure that individual commodity products and markets are protected from climate risk.

Exchanges set significantly higher margins for products perceived as risky—for example, CME set the initial margin for bitcoin futures at 35% of notional value but at just 7% for crude oil. After turmoil in the WTI crude oil contract (which saw a one-day price fluctuation of \$55 to a first-ever dive into negative pricing), CME raised crude oil futures maintenance margins by 20% for the June 2020 contract. Increased margin requirements reflect increased risk. The Commission should therefore require adjustments to margin requirements to account for rising climate risk.

6. **Incorporate Climate Risk into Supervisory Stress Tests and Scenario Analyses.** The CFTC regularly conducts supervisory stress tests of clearinghouses and other jurisdictional entities to ensure they can handle a range of extreme scenarios, but the tests do not incorporate climate-related considerations. Exchanges need to be able to withstand the unique risks climate change presents to their operations. The CFTC should supplement or replace stress tests with scenario analyses as appropriate.
7. **Set Speculation Limits That Curb or Stop Financial Institutions from Investing or Speculating in Fossil-Fuel Commodities.** The climate crisis has been called “the greatest and widest-ranging market failure the world has ever seen.”⁷ Simply put, excessive speculation distorts prices and interferes with effective price signaling, contributing to market failures and making solutions more difficult to implement. This point has even more force regarding a problem as grave and systemically important as climate change. To combat price distortions, the CFTC should adopt a rule to eliminate speculation in or limit the size of permissible speculative positions in fossil fuel commodities.

⁷ *Managing Climate Risk in the U.S. Financial System: Report of the Climate-Related Market Risk Subcommittee, Market Risk Advisory Committee of the U.S. Commodity Futures Trading Commission, 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>.

8. **Consider Promoting Climate Target Mandates in Swaps.** JP Morgan and Enel recently entered into a swap for which certain interest payments are tied to the respective companies' environmental performance targets.⁸ The Commission should explore whether promoting such terms for swaps could foster measurable and meaningful climate targets for market participants.

H. Engage the Federal Insurance Office to Change the Insurance Industry's Behavior.

The Federal Insurance Office (FIO) lacks direct regulatory authority over insurers, which are regulated at the state level. But the FIO can serve useful roles in collecting information about insurers and the market and in making that data publicly available, in researching and analyzing insurers and the industry, and in advising FSOC, state regulators, Congress, and international bodies.

Background

Climate change is already affecting the insurance industry adversely on both sides of insurers' balance sheets, and in turn it is harming policyholders. On the underwriting side, it is well known that climate change is increasing the frequency and severity of catastrophic events such as wildfires and hurricanes. Less appreciated are harms that do not grab headlines but create losses, such as extreme heat, severe downpours and winds that strain infrastructure, and increased disease and violence. Property and casualty (P/C) insurers typically state that they are not very vulnerable to these types of "physical" climate risks because they have short-term contracts, typically one year in duration, and can reprice them or discontinue coverage. Indeed, in response to unprecedented wildfires in the western United States over the past few years, P/C insurers have been exiting fire-prone regions.⁹ The California Department of Insurance placed one-year moratoria on dropping policyholders in or near affected ZIP codes in December 2019 and November 2020.¹⁰ It remains to be seen whether P/C insurers' optimism regarding their own prospects is merited. Regardless, their plan to raise prices and exit markets may harm other financial institutions, policyholders, financial stability, and the broader economy.

Liability risk also could come into play. There are many attempts to hold fossil fuel companies accountable for climate change in court. Some may eventually gain traction, especially if the culture continues to shift sharply toward climate solutions and against fossil fuels, and as fossil fuel companies lose market share and political and economic power.

On the investment side, insurers face climate risks similar to those confronting all investors and financial institutions—both physical and transition risks.

They also increasingly face reputational risk from their fossil-fuel underwriting and investments, as campaigners pressure them to abandon these activities. Globally, at least 23 insurers representing 12.9% of the primary and 48.3% of the reinsurance market have ended their cover for coal. Nine have exited tar sands. At least 65 insurers with combined investments worth \$12 trillion have adopted divestment policies of some kind.¹¹ U.S. insurers lag far behind their international peers on both fossil fuel cover and investment.¹²

The actions of regulators in the U.S. also trail those of their international peers. These are the only significant actions to date:

- The National Association of Insurance Commissioners (NAIC) adopted a climate disclosure survey in 2009. Initially, only California used it. At present, five other states do as well.¹³ Responses can be vague and unhelpful, and at times they simply quote other publicly available information, such as letters to shareholders.¹⁴

8 See Anna Hirtenstein, "JPMorgan Currency Deal Highlights Finance's Green Shift," *Wall Street Journal*, Oct. 26, 2020, <https://www.wsj.com/articles/jpmorgan-currency-deal-highlights-finances-green-shift-11603727838>.

9 See, e.g., Christopher Flavelle, "As Wildfires Get Worse, Insurers Pull Back from Riskiest Areas," *New York Times*, Aug. 20, 2019, <https://www.nytimes.com/2019/08/20/climate/fire-insurance-renewal.html>; Christopher Flavelle, "Wildfires Hasten Another Climate Crisis: Homeowners Who Can't Get Insurance," *New York Times*, Sept. 2, 2020, <https://www.nytimes.com/2020/09/02/climate/wildfires-insurance.html>.

10 California Department of Insurance, Commissioner Announces More Than 1 Million Homes Now Have Protection from Insurance Non-Renewal, Dec. 19, 2019, <http://www.insurance.ca.gov/0400-news/0100-press-releases/2019/release98-19.cfm>; California Department of Insurance, Insurance Commissioner Lara Protects More Than 2 Million Policyholders Affected by Wildfires from Policy Non-Renewal for One Year, Nov. 5, 2020, <http://www.insurance.ca.gov/0400-news/0100-press-releases/2020/release114-2020.cfm>.

11 David Mason and Peter Bosshard, *Insuring Our Future, The 2020 Scorecard on Insurance, Fossil Fuels and Climate Change*, <https://www.insureourfuture.us/s/2020-Insurance-Scorecard.pdf>.

12 *Id.*

13 California Department of Insurance, NAIC Climate Risk Disclosure Survey, <http://www.insurance.ca.gov/0250-insurers/0300-insurers/0100-applications/ClimateSurvey/index.cfm>.

14 For the survey questions, see http://www.insurance.ca.gov/0250-insurers/0300-insurers/0100-applications/ClimateSurvey/upload/QUESTIONS-AND-GUIDELINES-CLIMATE-RISK-SURVEY-REPORTING-YEAR-2019_MPRevis-_.pdf. As an example, see responses from Chubb's 2019 survey' at https://interactive.web.insurance.ca.gov/apex_extprd/f?p=201:3::NO:RP:P3_NAIC_YEAR:2019%20%2010052&cs=1E9BB71FD41C2957E861737CD54C70978.

- The California Department of Insurance has taken other steps as well:
 - a. In 2016, it asked insurers to divest from thermal coal voluntarily.¹⁵
 - b. Also in 2016, it required insurers to report their fossil fuel investments and made the data publicly available.¹⁶ Since then, it has updated the database with information it already has on hand rather than requiring insurers to submit it.¹⁷
 - c. In 2019, it released the results of the 2^o Investing Initiative’s climate scenario analysis of the collective investment portfolio of California-licensed insurers with over \$100 million in premiums.¹⁸
- In September 2020, the New York Division of Financial Services instructed insurers that it “expects all New York insurers to start integrating the consideration of the financial risks from climate change into their governance frameworks, risk management processes, and business strategies.”¹⁹ This step appears to be the first of a series.

Regulators elsewhere are well ahead of the United States. For example, the Bank of England’s Prudential Regulation Authority included an “exploratory exercise” on climate in its 2019 stress tests for insurers.²⁰ It planned to initiate climate stress tests in 2020 but postponed them until 2021 due to COVID-19.²¹

Relevant FIO Powers and Duties

The following FIO powers and duties are relevant to identifying and reducing climate risk among insurers:

- monitoring “all aspects” of the insurance industry, “including” issues or regulatory gaps that could contribute to a systemic crisis in either the insurance industry or the financial system. 31 U.S.C. § 313(c)(1)(A);
- monitoring the extent to which traditionally underserved communities and consumers have access to affordable insurance, *id.* § 313(c)(1)(B);
- recommending that the FSOC designate an insurer as a systemically significant nonbank financial institution, *id.* § 313(c)(1)(B); and
- developing policy on international prudential insurance matters, *id.* § 313(c)(1)(E).

FIO also has broad authority to collect information from insurers in furtherance of the above duties, *id.* § 313(e), and it must submit annual reports to Congress on the insurance industry, *id.* § 313(n)(1)(B).

Recommendations for FIO

This section focuses on (1) collecting data, conducting research, and monitoring the industry; (2) advising the FSOC; and (3) making recommendations to state regulators.

1. **Collect Data.** To carry out its duties to monitor, study, and report on the insurance industry and insurance regulation, FIO should seek robust data and information from insurers regarding climate risk and make the information publicly available. It can immediately initiate the process of issuing a data call seeking the following:
 - a. information that follows the Task Force on Climate-related Financial Disclosure recommendations;²²
 - b. for U.S.-licensed insurers, groups, or holding companies with more than \$100 million in annual premium, data on fossil fuel and other carbon-intensive investments, including investments in

¹⁵ “California Insurance Commissioner Calls for Insurance Divestment from Coal,” *Insurance Journal*, Jan. 25, 2016, <https://www.insurancejournal.com/news/west/2016/01/25/396279.htm>.

¹⁶ Don Jergler, “California’s Climate Risk Database Calls Out Insurer Carbon Investments,” *Insurance Journal*, Jan. 18, 2017, <https://www.insurancejournal.com/news/west/2017/01/18/439211.htm>.

¹⁷ Telephone conversation with Dave Jones, former California Commissioner of Insurance.

¹⁸ See California Department of Insurance, New Analysis of Climate Risk Exposure of Insurers’ Investments Released, Jan. 4, 2019, <http://www.insurance.ca.gov/0400-news/0100-press-releases/2019/release006-19.cfm>; California Department of Insurance, Scenario Analysis: Assessing Climate Change Transition Risk in Insurer Portfolios, https://interactive.web.insurance.ca.gov/apex_extprd/f?p=250:70.

¹⁹ New York Department of Financial Services, Insurance Circular Letter No. 15 (2020), Sept. 22, 2020, https://www.dfs.ny.gov/industry_guidance/circular_letters/cl2020_15.

²⁰ Bank of England, Insurance Stress Test 2019, Aug. 16, 2019, <https://www.bankofengland.co.uk/prudential-regulation/letter/2019/insurance-stress-test-2019>.

²¹ See Alastair Marsh, “Bank of England Postpones Climate Stress Tests to Focus on Virus,” *Bloomberg*, May 7, 2020, <https://www.bloomberg.com/news/articles/2020-05-07/bank-of-england-postpones-climate-stress-tests-to-focus-on-virus>; The Bank of England Is Restarting the Climate Biennial Exploratory Scenario, Nov. 13, 2020, <https://www.bankofengland.co.uk/news/2020/november/the-boe-is-restarting-the-climate-biennial-exploratory-scenario>.

²² Task Force on Climate-related Financial Disclosure, *Final Report: Recommendations of the Task Force on Climate-related Financial Disclosure* (2017), <https://www.fsb-tcfd.org/publications/final-recommendations-report/>.

- i. entities for which 20% of revenue is from fossil fuels (burning, extraction, transport),
 - ii. utilities for which 20% of electricity is generated from fossil fuels, and
 - iii. other high carbon-emitting sectors (cement, steel, and automobiles with internal combustion engines);
- c. for U.S.-licensed insurers, groups, or holding companies with more than \$100 million in annual premium, data on fossil fuel cover. The market is in a period of substantial, rapid change, with primary and reinsurers around the globe increasingly declining to write for fossil fuel companies and projects. Monitoring, studying, and making recommendations regarding the P/C market requires an understanding of who is participating and who is insuring what.

FIO should make the data it collects available to the public in a searchable database.

FIO should consult with state regulators as required under 12 U.S.C. § 312(e)(4), and it should develop a unified data call that will spare resources and avoid problems with standardization.

2. **Join the Sustainable Insurance Forum (SIF).** Directing FIO to join SIF would signal the Administration's commitment to sustainability in insurance markets and would help FIO share knowledge and identify best practices from insurance supervisors and regulators in other countries that are well ahead of the United States. Several U.S. insurance regulators as well as the National Association of Insurance Commissioners (NAIC) are already members.
3. **Advise FSOC.** FIO should begin advising FSOC on integrating climate risk into nonbank SIFI designations and advising the Board on integrating climate risk into stress tests and scenario analyses for insurers designated as SIFIs.
4. **Monitor the Insurance Industry and Climate-Related Regulatory Moves, Conduct Research, and Report the Findings.** FIO should initiate monitoring, research, and reporting on the insurance industry and insurance regulation. FIO should identify and report on the climate risks facing the industry and monitor them on an ongoing basis, making updates as necessary based on scientific or technological developments. In addition, it should conduct research and engage in analyses that will inform regulatory decisions, working with the Office of Financial Research as relevant. Potential topics include the following:
 - Are state insurance regulators integrating climate risk into their regulatory and supervisory regimes and, if so, how? Are gaps in state regulatory regimes resulting in inadequate supervision? To what extent are state insurance regulators requiring insurers to undertake climate-risk scenario analysis and climate-risk stress tests? What potential changes to insurance regulation should FSOC recommend to state regulators or to Congress under Dodd-Frank Act § 120(d)?
 - How should stress testing and scenario analysis for insurers be conducted?
 - How should climate-sensitive risk-based capital requirements be operationalized? No methodology has been developed, and FIO could perform a valuable service by studying the question and formulating recommendations. The answer will involve a combination of (1) assessing climate liabilities from the underwriting side and transition risk for investments and determining whether capital requirements need to be adjusted in response and (2) including climate considerations in risk weights for capital.
 - Are insurers' incentives aligned properly regarding climate risk? Are insurers preparing adequately for climate risk on their own? Are they demonstrating any special expertise on climate risk? Insurers commonly use claims about their risk-management expertise to justify opposing regulation and declining to take voluntary steps to mitigate climate risk. There are both theoretical and empirical reasons for skepticism regarding these claims.
 - What are the possible effects of climate change on life insurers and life insurance markets?
 - What are the implications of a warming world for the insurance industry, insurance regulation, policyholders, marginalized communities, and the broader economy?
 - a. P/C insurers commonly suggest that climate risk to the underwriting side of their business is mitigated by their ability to reevaluate contracts frequently and either reprice or drop coverage. FIO should study the short-, medium-, and long-term consequences for insurance companies and markets if they pursue these responses. It also should consider whether, as climate harms progress, these responses put the industry at risk

of contracting significantly and, if so, whether the stability of individual insurers or the insurance system as a whole would be threatened or would require government backstops for segments of the insurance market.

- b. Given its mandate to monitor the extent to which traditionally underserved communities and consumers have access to affordable insurance, FIO should study the effects of these responses on particular communities or types of policyholders, especially any disproportionate harm to low-income communities and communities of color.²³
 - c. With the OFR, FIO should study the broader systemic risk implications of insurers exiting markets, giving particular attention to whether the discontinuation of P/C insurance for large sets of residential or commercial policyholders would have severely negative effects on the broader economy or spark financial crises.
5. **Support the IAIS on Climate.** Support the International Association of Insurance Supervisors in demonstrating how climate risk should be covered under the Insurance Core Principles and in encouraging individual regulators and supervisory colleges to integrate climate risk into insurance supervision.²⁴
6. **Make Recommendations to State Regulators.** As noted above, regulators in other countries are well ahead of their counterparts in the United States. As a general matter, FIO should help make the case for more robust climate-related regulation. It should highlight best practices from leading states and foreign jurisdictions and encourage NAIC and states to pursue them.

Conducting a data call like this using FIO's authority would have many advantages. FIO would cover the entire United States and obviate problems regarding standardization of the data. However, if FIO does not collect the data discussed above, it should advise the states to do so and work with the NAIC to develop a model disclosure for purposes of standardization.

FIO should make several other specific recommendations to state regulators regarding their individual roles and their participation in supervisory colleges. Whenever appropriate, it can recommend that NAIC develop model rules, guidance, or recommendations:

- a. States should conduct climate scenario analyses and stress tests that include climate risks.
 - i. State regulators should require that insurers conduct stress tests as well as scenario analyses of their investments and underwriting using a model like PACTA, the NGFS scenarios, or the 2° Investing Initiative.
 - ii. Regulators should conduct the same scenario analyses and stress tests.
 - iii. Regulators should consider the implications of these tests and analyses for both individual firms and the industry as a whole.
 - iv. FIO should recommend standard models for stress tests and scenario analyses (allowing insurers to go beyond what is prescribed) or, at a minimum, recommend that NAIC or state regulators standardize as much as possible.
- b. State regulators should require insurers to integrate climate into their Enterprise Risk Management (ERM) and Own Risk and Solvency Assessments (ORSA) processes.
- c. State regulators should develop a methodology for integrating climate risk into capital requirements and implement it (or if FIO or NAIC develops a methodology, state regulators should use it).
- d. State regulators should urge insurers to phase out fossil-fuel cover and investment to stop them from contributing adversely to their own risk. Insurers should not be contributing to the climate crisis given the risk it poses to their balance sheets and the threat it poses to the ongoing viability of insurance coverage in many markets. It appears state regulators lack the authority to require insurers to phase out fossil-fuel cover and investment, but they can attempt to use soft power and persuasion.

²³ See 31 U.S.C. § 313(c)(1)(B).

²⁴ See, e.g., IAIS, Application Papers on the Supervision of Climate-related Risks in the Insurance Sector (2020).

I. Address Climate Risk in the Fed’s Emergency Lending Facilities.

Climate change is and will continue to be damaging to the Fed’s balance sheet because of the present credit risk and the ongoing turmoil in the energy sector, which will be increasingly compounded by market and transition risks.²⁵ Because the Federal Reserve’s emergency lending facilities failed to factor in climate risks (as does the market overall), they failed to ensure a sustainable portfolio that protects public investment.²⁶ The bankruptcies, defaults, and credit deterioration that plagued the oil and gas sector long before the pandemic, combined with ongoing transition and liability risks, create risks of default in the facilities’ collateral.²⁷ Moreover, the Federal Reserve’s portfolio is overweight in oil and gas, violating its commitment to market neutrality.²⁸ This section proposes a set of policies and principles to guide both the portfolio created by the 2020 programs and any new programs the Board and the Treasury Department may put in place.

Addressing Climate-Related Risk in the Fed’s Bond Purchasing Program (SMCCF)

The Board authorized two programs to support large employers: the Primary Market Corporate Credit Facility (PMCCF) and the Secondary Market Corporate Credit Facility (SMCCF). The CARES Act allocated \$25 billion to the SMCCF and \$50 billion to the PMCCF. Each could be leveraged as much as 10-to-1, for up to \$750 billion total in possible purchases. As of the December 11 disclosures, the PMCCF remains unused. The stimulus bill passed by Congress in late December 2020 prohibits additional extensions of credit through these facilities or modifications of their terms, but it does not bar the Fed from creating similar facilities²⁹

Recommendations for the SMCCF

1. Rebalance the portfolio to reduce or remove positions that contradict the Board’s financial stability mandate: Given the escalating rate of bankruptcies in the fossil fuel industry, the potential for destabilizing “green swan” events, and the industry’s vulnerability to “black swan” events like the pandemic, the bonds of fossil fuel firms could be in trouble before long.³⁰ Holding them creates serious financial risks for the public investment in the portfolio, and the Board should strongly consider reducing or removing these positions in the near term, rather than holding them through the term of the bonds. In the alternative, the Board should at least rebalance the portfolio so that it appropriately reflects each sector’s share of the economy.
2. Evaluate whether 7-to-1 is the right leverage limit for junk bonds, especially in volatile sectors like energy and consider implementing a “ratings floor.” Should a bond’s credit rating breach the floor, the Board should consider unloading the bond or adjusting the SMCCF portfolio’s leverage overall to account for the increased risk of default.

Recommendations for Future Programs

In any future market interventions, the Treasury Secretary should work with the Fed to ensure they protect workers and the general public, do not contribute to financial instability, ameliorate rather than exacerbate the climate crisis, and do not foster moral hazard by rewarding reckless conduct by financial institutions or the managers of other large businesses. Specific recommendations include the following:

25 The GICS Energy sector has seen the most deterioration in credit risk across all sectors over the past five years: as oil prices have fallen, a further 5% decline has occurred since the beginning of 2020. See InfluenceMap, *Necessary Intervention or Excessive Risk? Corporate Bond Risk Before and After COVID-19 Amid the Fed’s Buying Programs* (June 2020), <https://influencemap.org/report/Necessary-Intervention-or-Moral-Hazard-5e42adc35b315cc44a75c94af4ead29c>.

26 In a talk to the United Nations Environment Programme Finance Initiative, European Central Bank President Christine Lagarde pointed out that financial markets have “not priced in the massive risk” of climate change. Carolyann Look, “Lagarde Says ECB Needs to Question Market Neutrality on Climate,” *Bloomberg*, Oct. 14, 2020, <https://www.bloomberg.com/news/articles/2020-10-14/lagarde-says-ecb-needs-to-question-market-neutrality-on-climate>.

27 Bankruptcies: Over 200 fracking companies have gone bankrupt since 2015. See Center for International Environmental Law, *Pandemic Crisis, Systemic Decline: Why Exploiting the COVID-19 Crisis Will Not Save the Oil, Gas, and Plastic Industries* (2020), <https://www.ciel.org/reports/pandemic-crisis-systemic-decline/>. From July through September 2020, 17 oil and gas producers filed for bankruptcy. See Haynes & Boone, LLP, *Oil Patch Bankruptcy Monitor*, Sept. 2020, https://www.haynesboone.com/-/media/files/energy_bankruptcy_reports/oil_patch_bankruptcy_monitor.ashx. Defaults: In the third quarter of 2019, 91% of defaults on corporate debt were due to oil and gas companies. See Bethany McLean, “Coronavirus May Kill Our Fracking Fever Dream,” *New York Times*, Apr. 10, 2020, <https://www.nytimes.com/2020/04/10/opinion/sunday/coronavirus-texas-fracking-layoffs.html>. Credit deterioration: The credit performance of the GICS energy sector is the worst across major sectors and is greater than the 3% decline in the consumer discretionary sector, the sector facing the second-largest decline. See Influence Map, *Is the Fed Being Sector Neutral? A Financial Analysis of the US Federal Reserve’s Corporate Bond Market Interventions* (July 2020), <https://influencemap.org/report/Is-the-Fed-Being-Sector-Neutral-3a1294e4de3b6275fae9370d6f68cc70>.

28 Influence Map, *Is the Fed Being Sector Neutral? A Financial Analysis of the US Federal Reserve’s Corporate Bond Market Interventions* (July 2020).

29 Consolidated Appropriations Act, 2021, § 1005, <https://rules.house.gov/sites/democrats.rules.house.gov/files/BILLS-116HR133SA-RCP-116-68.pdf>.

30 Bank of International Settlements, *The Green Swan: Central Banking and Financial Stability in the Age of Climate Change* (2020), <https://www.bis.org/publ/othp31.pdf>.

3. Avoid the firms that exacerbate climate change the most: The Fed's most recent financial stability report acknowledged that climate change is a financial stability risk.³¹ The Fed should remove from its balance sheet assets that needlessly exacerbate risks the Fed itself has identified.
4. Provide climate disclosures: The Fed should lead by example and disclose climate-related risks to its emergency lending portfolio, in line with the recommendations issued by the Task Force on Climate-related Financial Disclosures (TCFD). This type of disclosure should also apply to underlying collateral for emergency lending programs such as the Term Asset-Backed Securities Loan Facility (TALF), not just the assets the Fed holds directly. In addition, the Fed should disclose the greenhouse gas emissions it is financing through its emergency lending activities using the Partnership for Carbon Accounting Financials methodology or a similar approach. The Fed and the public need to understand the climate-related risks faced by the Fed's portfolio and the portfolio's contribution to the climate crisis.
5. Conduct stress testing: The Fed should stress test its emergency lending portfolio against adverse climate-related scenarios, including both transition risks and physical risks. This exercise would provide further transparency regarding the risks that climate change poses to the Fed's emergency lending portfolio and would serve as a pilot program as the Fed begins to construct stress tests for the banks it supervises.
6. Include eligibility conditions in the spirit of what Congress articulated in the CARES Act Sec. 4003(c)(3)(A) and Sec. 4003(c)(3)(D):
 - a. worker retention and re-hiring criteria,
 - b. dividend and buyback prohibitions,
 - c. limits on executive compensation, and
 - d. robust climate disclosures that account for both climate risk to the issuer and the risk the issuer poses to the economy by contributing to climate change. Disclosure should include how better pricing of carbon risk across a company's assets would affect its solvency and credit ratings.
7. Move investment management in house: Rather than rely on a giant asset manager like BlackRock for facility execution and investment management, the Fed should shift this work in house. If doing so is not possible, it should avoid conflicts by finding an independent advisor that is not also an asset manager. The Bank of England and the ECB have not found it necessary to get conflicted external help with their bond buying programs.

Climate change is and will continue to be damaging to the Fed's balance sheet because of the present credit risk and the ongoing turmoil in the energy sector, which will be increasingly compounded by market and transition risks.

³¹ Federal Reserve, *Financial Stability Report* (Nov. 2020), <https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf>.

Part III: Capital Markets Regulation

Agencies: This section concerns the SEC, CFTC, Department of Labor (DOL), the Financial Industry Regulatory Authority (FINRA), and the Public Company Accounting Oversight Board (PCAOB).

A. Build Climate Capacity at the SEC.

1. The Chair should direct the Division of Economic and Risk Analysis (DERA) to work with the newly established Office of Climate Risk (described in section I.B) to undertake continuous research and publications aimed at understanding how climate-related risks are impacting and could impact markets and market participants under SEC and FINRA oversight, including brokers, investment advisers, and speculative traders and specific investment vehicles.
2. The SEC should establish a climate risk advisory committee with the Director of the Office of Climate Risk as the agency's point person for the committee.
3. The SEC should join the Network for Greening the Financial System as a member, as discussed in section II.A.
4. The Director of the Division of Corporation Finance should establish a team within the division, led by a senior official position (at the assistant director or a higher level), that is responsible for reviewing non-financial and financial corporate disclosures of climate-related information, providing feedback to issuers to promote compliance with climate-related disclosure obligations, and referring issuers that fail to meet their reporting obligations to the Division of Enforcement.
5. The Director of the Division of Corporation Finance should establish a team within the Division of Corporation Finance, led by a senior official position (at the assistant director or higher level), that is responsible for reviewing financial firm corporate disclosures of climate-related information. This team should serve simultaneously in both the divisions of Investment Management and Trading and Markets, to handle financial firm disclosures by entities principally overseen by those divisions. This team should also be responsible for providing feedback to issuers to promote compliance with climate-related disclosure obligations and for referring issuers that fail to meet their reporting obligations to the Division of Enforcement.
6. The Director of the Division of Investment Management should establish a senior official position (at the assistant director or higher level) to oversee a team reviewing and providing feedback on Sustainable Investment Policies (discussed in section III.D).
7. The Director of the Office of Compliance, Inspections, and Examinations (OCIE) should establish a "climate team" for examining and auditing compliance of investment advisers and issuers with their climate-related obligations. Immediately thereafter, the OCIE should prioritize examinations of these advisers and issuers as part of its National Exam Program.
8. The SEC should revise procedures for appointing members of advisory committees to the SEC to ensure that committees have not more than 15 members and each commissioner is granted at least two, but not more than three, selections. The procedures should ensure that at least one member of each committee has ESG-related expertise. Appointees for departing commissioners should remain until the earlier of (1) re-appointment by the commissioner's replacement, (2) replacement by the new commissioner, or (3) expiration of the term of appointment. The Investor Advisory Committee should also be restored to its proper role of representing investors; to this end, investors should be well represented on the Committee.

The above-noted appointment procedures are essential because the advisory committees are, often, nearly exclusively focused on limiting the SEC's regulatory requirements, particularly disclosure requirements for issuers and investment funds.

9. The SEC should convene a roundtable and project with FASB and the International Accounting Standards Board (IASB) to harmonize their respective climate-related standards and to draft a report on that effort.
10. The SEC should become a more active participant in the International Organization of Securities Commission's (IOSCO) climate-related efforts and should ensure that the divisions of Corporation Finance and Investment Management are committed to standardization and adoption of appropriate expectations for companies and advisers. Instead of taking a defensive or passive posture, the SEC should take a collaborative and proactive one that reflects and builds on the leadership of other IOSCO members.
11. The SEC should revise its rulemaking and guidance process to ensure robust participation by the Office of the Investor Advocate, Office of Climate Risk, and other ESG-related offices such as the Office of Minority and Women Inclusion.

B. Require Climate-Related Disclosures.

A cornerstone of our financial regulatory system is disclosure. As the SEC explained on its website until very recently, the disclosure of

meaningful financial and other information to the public . . .

provides a common pool of knowledge for all investors to use to judge for themselves whether to buy, sell, or hold a particular security. Only through the steady flow of timely, comprehensive, and accurate information can people make sound investment decisions.

The result of this information flow is a far more active, efficient, and transparent capital market that facilitates the capital formation so important to our nation's economy.³²

Put simply, creation of a robust public disclosure regime is the first step in maintaining a system of accountability for companies operating businesses or marketing their securities in the United States. A robust disclosure regime also helps our society properly allocate capital that drives our economy. The converse is also true. In the absence of adequate disclosure about companies' operations, investors and the public cannot meaningfully identify and assess the impact of these activities or take action to influence them. Nowhere is this truer than in climate-related disclosures.

Key regulators globally and numerous advocacy organizations are working to implement various climate-related disclosure regimes (e.g., the EU non-financial reporting directive). U.S. financial regulators need to participate constructively in ongoing dialogue with international bodies on climate-related disclosure, to use the disclosure regimes that have been developed by parties outside the U.S. to inform domestic efforts, and to create a system of mandatory disclosure requirements for U.S. markets.

Proper climate-related disclosure entails two distinct, but somewhat overlapping, sets of disclosures. First, non-financial companies should be required to make basic disclosures about their climate-related risks and impacts. Now that the United States has re-entered the Paris Agreement, these disclosures should be designed to help investors understand how issuers are adjusting their business practices to align with that accord's targets (i.e., net-zero emissions by 2050, with interim targets). Second, financial companies (e.g., banks and investment advisers) should be required to make disclosures about their own climate-related risks and impacts. However, these firms' disclosures should also include their roles in financing other firms (e.g., through "carbon-financed" measures), as is essentially required by regulators elsewhere in the world.

Recommendations for the SEC on Non-Financial Corporate Reporting

1. Direct the Division of Corporation Finance to make a public speech or statement committing the SEC, with input from Corp Fin, to develop climate-related disclosures for specific industries with most direct climate impacts (e.g., energy, transportation).

³² SEC, The Investor's Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation, https://web.archive.org/web/20140321130353if_/http://www.sec.gov/about/whatwedo.shtml#Uyw4wdzLeUk.

2. Propose and adopt a rule under the Exchange Act to revise Form 10K filings to include information regarding
 - a. identification and evaluation of the potential financial impacts of physical, transition, and any other (e.g., reputational, market, liquidity) risks posed to the issuer by climate change as well as of any risk management strategies;
 - b. any established corporate governance processes and structures to identify, assess, and manage climate-related risks, including any assumptions related to climate change;
 - c. specific actions that the covered issuer is taking to mitigate identified present and future risks, taking into account different climate scenarios;
 - d. the robustness of the strategy of the covered issuer for addressing climate risks, taking into account different climate scenarios;
 - e. ways that climate risk is incorporated into the overall risk management strategy of the covered issuer;
 - f. modifications of business strategy to remain competitive to limit emissions (including Scope 3 emissions) in line with the commitments of the Paris Agreement; and
 - g. the degree to which the company’s climate risks are based on assumptions that are aligned with the Paris Agreement. If risks are not based on assumptions that are aligned with the Paris Agreement, an audited, Paris Agreement-aligned pro forma presentation should be provided as a supplemental disclosure.³³

This rule should be consistent with the Financial Stability Board’s Task Force on Climate-Related Financial Disclosures (TCFD). It should, to the extent possible, seek to remain consistent with the European Commission’s Non-Financial Reporting Directive (NFRD).

The rule must also define the terms “physical risks posed to the covered issuer by climate change,” “transition risks posed to the covered issuer by climate change,” and “baseline scenario.” (See, for example, the Climate Risk Disclosure Act of 2019, which defines “baseline scenario” as emissions “continue to grow, resulting in an increase in global average temperature of 1.5°C or more above pre-industrial levels.”)

3. Propose and adopt rules under the Exchange Act to revise Form 10K to include a TCFD-compliant approach that also includes information regarding
 - a. greenhouse gas emissions from operations, broken down by country (to include Scope 1, 2, and 3 emissions);
 - b. facilities and assets committed in 3, 5, 10, and 20 years in each of the regions with high or extremely high baseline water stress;
 - c. facilities and assets committed in regions of high or extremely high potential for storms or fire within the next 3, 5, or 10 years;
 - d. the issuer’s total energy consumption, broken out by energy source and type;
 - e. any potential production areas threatened by drought and water scarcity;
 - f. any potential production areas threatened by water security issues;
 - g. any potential production or services located in areas at risk of high heat stress for humans;
 - h. potential unique threats from disease in areas of operations (e.g., meat processing plants);
 - i. climate-related political spending, including lobbying and direct and indirect campaign contributions (e.g., through 501(c)(6) and 501(c)(4) organizations); and
 - j. potential for political instability and violence in areas of operation.
4. Propose and adopt rules under the Exchange Act to modify Form 10K to include disclosure of scenario analysis. One scenario could be defined as one in which firms must comply with regulations aimed at transitioning the economy to a point at which warming is limited to 1.5°C above pre-industrial levels by 2050. Another scenario should be defined as one in which firms are permitted to continue with business as usual, resulting in an increase in warming of approximately 4.5°C above pre-industrial levels by 2050.

³³ Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization but that the organization indirectly impacts in its value chain. See Environmental Protection Agency, *Scope 3 Inventory Guidance*, accessed Dec. 22, 2020, <https://www.epa.gov/climateleadership/scope-3-inventory-guidance>.

5. Work with the PCAOB to develop expectations for assurability and completeness of disclosures identified above.
6. Work with the PCAOB to develop reviews of “critical audit matters” that may relate to climate change (e.g., management assumptions about the values of long-lived assets such as pipelines).

Recommendations for the SEC on Financial Firm Reporting

“The lack of a clear definition of what is ‘environmentally sustainable’ currently presents one of the biggest obstacles to scale up clean investment.”³⁴ Notably, however, there are significant risks of so-called greenwashing and misleading claims by firms marketing, advising, or selling securities. In general, the SEC should work with regulators (in the United States and abroad) and market participants to adopt a clear taxonomy for “climate-related” or “ESG” investment strategies and investment products. Effective ESG reporting regulations will require financial institutions to analyze the climate-related impact of their activities, report outcomes to investors and the public, and, applying a standardized taxonomy, use appropriate language to describe the nature of their capital allocation strategies.

7. Propose and adopt rules under the Investment Advisers Act to ensure that any mutual funds marketed as sustainable, climate focused, ESG, or the like meet basic, standardized criteria. The criteria may include whether the fund is one or some combination of the following: (1) ESG exclusionary, (2) ESG inclusionary, (3) ESG impact investing, or (4) engaged in active ownership. Funds should describe their sustainability objectives, how the objectives are met, and the overall sustainability impact of their product as well as the resources provided by the adviser to meet the objectives. The European Commission’s taxonomy could be helpful, but it should not be directly followed because, among other reasons, it ties the classification of “green” to a set level of carbon emissions per kilowatt hour, currently a level that would permit natural gas to be included.
8. Propose and adopt rules under the Investment Company Act to ensure that any registered investment companies that are marketed as sustainable, climate focused, ESG, or the like meet basic, standardized criteria. The companies should describe their sustainability objectives, how the objectives are met, and the overall sustainability impact of their products.
9. Propose and adopt rules under the Investment Advisers Act (after consultation with the Federal Reserve, OCC, FDIC, and CFTC) for public disclosure requirements for investment advisers (to both registered and unregistered funds) regarding the climate impacts (in particular, to facilitate the reduction of climate-related financial crisis risks) of their investment portfolios. Rules should cover disclosure of the following:
 - a. financed emissions, including implied negative emissions (deforestation) anywhere in the world, expressed as a percent of total dollar value of combined portfolios invested in high-carbon-emission sectors based on public data of the EPA’s GHG Reporting Project;
 - b. maturity of investments within and across all portfolios;
 - c. value and number of investments in new projects within each sector; and
 - d. scenario analyses for impacts on all portfolios of reaching the Paris Agreement goal of limiting warming to 1.5°C above pre-industrial levels.
10. Propose and adopt rules under the Investment Company Act (after consultation with the Federal Reserve, OCC, FDIC, and CFTC) for public disclosure requirements for registered investment companies regarding the climate impacts (in particular, to facilitate the reduction of climate-related financial crisis risks) of their holdings. Rules should cover disclosure of the following:
 - a. financed emissions, including implied negative emissions (deforestation) anywhere in the world, expressed as a percent of total dollar value of the fund invested in high-carbon-emission sectors based on public data of the EPA’s GHG Reporting Project;

³⁴ European Commission, Communication from the Commission to the European Parliament, Apr. 24, 2020, <https://ec.europa.eu/transparency/regdoc/rep/1/2020/EN/COM-2020-155-F1-EN-MAIN-PART-1.PDF>.

- b. maturity of investments (including legal final maturities) within and across all holdings of the fund; and
 - c. scenario analyses for impacts on all portfolios of reaching the Paris Agreement goal of limiting warming to 1.5°C above pre-industrial.
11. Revise SEC Industry Guide 3 to include specific disclosure requirements for bank holding companies to enhance disclosure of climate-related risks that impact the banking industry.
- a. Physical risks:
 - i. Build on the September 2020 [TCFD Banking Pilot Project Phase II](#) study for physical risk to banks, including assessments of risks to agricultural and real estate loan portfolios.
 - ii. Disclose operational risks to banks from having critical infrastructure in areas exposed to flooding, wildfires, and power outages.
 - b. Transition risks: Disclose quantitative risks to bank portfolios, including credit, liquidity, and market risks. Existing Guide 3 Disclosures should be supplemented with the following:
 - i. in the “Distribution of Assets” disclosure, a new category of assets in sectors with relatively immediate and direct exposure to physical and transition risks, such as assets in fossil fuel and power industries (“high-impact sectors”);
 - ii. bank investments in debt securities of issuers in high-impact sectors, including the weighted average yield of those investments;
 - iii. bank loans to borrowers in high-impact sectors, including
 - 1. maturity analysis (both expected maturity and legal final maturity, particularly for structured finance issuers),
 - 2. interest rate sensitivity,
 - 3. credit ratios and credit losses (including nonaccrual, past due, restructured, and “potential problem” loans),
 - 4. “foreign outstandings”; and
 - c. loan loss experience in high-impact sectors.
 - d. As noted in section II.C.3, the FSOC and bank regulators should advise the SEC on Industry Guide 3 and other disclosure requirements to achieve robust and meaningful disclosure of climate risks to banks and to allow for comparisons among bank holding companies. These disclosures might also include the following:
 - i. the measurement and disclosure of emissions financed by the banking group and
 - ii. the disclosure of transition plans for the banking group to achieve, at a minimum, a 45% reduction in financed emissions by 2030 and a 100% reduction by 2050, including in its trading operation. These targets are from the most recent report by the Intergovernmental Panel on Climate Change, the recognized global authority on climate science (although its analyses are conservative). That report states that emission reductions in this range will be necessary to hold global temperature increase to 1.5°C, consistent with the Paris Agreement’s goal of holding temperature rise to “well below” 2°C and attempting to hold it to 1.5°C.³⁵ Of course, financial regulators could use targets set by some other authoritative body, in particular, targets set by President Biden or Congress.

Recommendations for the Department of Labor

12. Propose and adopt a rule under ERISA to require plans to obtain from all money managers that manage plan assets and make annual disclosures:
- a. the identification and evaluation of potential financial impacts of physical and transition risks posed to the assets within the plan portfolio by climate change and any risk management strategies;

³⁵ Intergovernmental Panel on Climate Change, Special Report: *Global Warming of 1.5 °C, Summary for Policymakers* (2018), <https://www.ipcc.ch/sr15/>; Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

- b. a description of any established corporate governance processes, including but not limited to proxy voting policies, and structures to identify, assess, and manage climate-related risks;
- c. a description of specific actions that the plan is taking to mitigate identified risks;
- d. a description of the robustness of the strategy of the plan for addressing climate risks, taking into account different climate scenarios; and
- e. a description of how climate risk is incorporated into the plan's overall risk management strategy.

To the extent possible, such annual disclosures should be based on methodologies that are consistent with those adopted by registered issuers of securities, investment advisers, brokers, futures commission merchants, banks, and other financial institutions.

C. Advance Shareholder Rights.

Investors must have the ability to make use of information on climate risks—and ESG factors generally—when making their investment and voting decisions. The Trump Administration worked to dramatically curtail investors' abilities to engage with companies, vote, and otherwise exercise their rights of ownership. Shareholder information and voting rights are of particular importance for investors who are already integrating ESG factors into their investment decisions, and these rights must be restored and expanded.

Day-One Recommendations for the SEC

1. Direct the Division of Corporation Finance to revise comments and no-action review determinations related to exclusions of proxies offered pursuant to Rule 14a-8, with a particular focus on narrowing the “ordinary business” and other exceptions that may lead to the inappropriate exclusion of shareholder proposals. The general orientation should favor the inclusion—not exclusion—of shareholder proposals.
2. Direct the Division of Corporation Finance to offer guidance to companies and to itself regarding consideration of ESG-related proxies.
3. Revise guidance for investment advisers to permit more direct reasonable reliance on advice from proxy advisers for voting recommendations and remove procedural obligations that require excessive deference to the management's views when determining how to vote, thereby reversing recently revised guidance.
4. Issue guidance under the Investment Advisers Act that an investment adviser shall vote shares held on behalf of others in annual shareholder meetings and at other times as may be necessary, unless the adviser is a conflicted party to the subject matter of the vote or such vote is otherwise prohibited by law. The Commission could also propose and adopt rules, which would be more difficult to overturn but take longer to implement. This approach could be viewed as adopting an approach similar to the Department of Labor's *Avon Letter*, which stated that, “[i]n general, the fiduciary act of managing plan assets which are shares of corporate stock would include the voting of proxies appurtenant to those shares of stock.”³⁶ The revisions should cover advisers for so-called passive funds.

The U.S. Chamber of Commerce and Republican leaders have repeatedly argued that index funds should be prohibited from voting because they are by nature “passive.”

5. Propose and adopt revisions to Rule 14a-8 to permit all investors who have owned at least \$2,000 worth of stock in the company for at least one year to offer shareholder proposals for inclusion on the company's ballot (revisions originally adopted by the SEC and standard practice for more than half a century). These revisions would reverse a highly controversial rule adopted in late 2020 and return to the prior longstanding criteria.
6. Propose and adopt revisions to Rule 14a-8 to lower resubmission thresholds to 3%, 5%, and 10%. These revisions would modify a highly controversial rule adopted in late 2020, and they are particularly important because shareholder proposals almost always need several years to build support.

³⁶ Letter from the Department of Labor to Helmut Fandl, Chairman of the Retirement Board, Avon Products, Inc. (Feb. 23, 1988).

7. Propose and adopt rules under the Investment Advisers Act to require investment advisers to identify customers' climate policy preferences and have policies intended to implement those preferences through the investment life cycle, including investment product identification, purchase, exercise of rights, and disposal. See section III.D on investment fiduciaries below.
8. Propose and adopt revisions to Rule 14A-2(B) to improve access and utility of proxy advice, including by eliminating conflicting "rights" of issuers. These revisions would reverse a mid-2020 rule from the SEC.
9. Propose and adopt revisions to Rule 14A-1(L) and Section 14(A) to clarify that proxy advisers would be engaged in "soliciting" votes only if they have a direct financial stake in securities of the company at issue or otherwise have a financial stake in the outcome. These revisions would more than reverse a mid-2020 rule from the SEC.
10. Propose and adopt rules under the Securities Act, Exchange Act, and Investment Advisers Act to prohibit mandatory investor arbitration (consider the Dodd-Frank Act arbitration language as authoritative).

This provision is essential to effective private, derivative suit enforcement. (And covering investment advisers would ensure that private fund investors could bring suits, which are generally not common today.) The SEC's Republican leadership has been looking for back-door methods to begin permitting mandatory arbitration clauses for shareholders in public companies. Following these recommendations would reinforce existing, settled law.

In addition, the SEC should actively bring enforcement cases for securities fraud against any company and its directors that would attempt, through bylaws or otherwise, to undermine private rights of action through mandatory arbitration or other means.

Recommendations for the Department of Labor

11. Propose and adopt rules under ERISA to require plans to identify beneficiaries' climate preferences and have policies intended to implement those preferences through plan investment offerings, voting of shares, and other actions. These revisions should not lower the duty of care with respect to fees and returns. See section III.D on investment fiduciaries below.
12. Propose and adopt revisions to the "Investment duties" regulation at 29 CFR § 2550.404a-1, which governs ERISA plan proxy voting and other "exercises of shareholder rights," to require fiduciaries to vote shares in annual shareholder meetings and exercise rights as shareholders at other times as may be necessary, unless the fiduciary is a conflicted party to the subject matter of the vote or the vote is otherwise prohibited by law.

These revisions would reverse a proposal that will become effective in early 2021, and they would constitute a natural modernization and extension of the DOL's *Avon Letter*.

13. Propose and adopt revisions to "investment duties" regulation to expressly permit ERISA plan fiduciaries to engage in shareholder proposals or to address issues identified by the fiduciaries or plan beneficiaries as relevant to the plan.

This proposal would eliminate the direct financial impact on the plan. See also section III.D on investment fiduciaries below.

Potential Legislation

Any of the above reforms could be mandated by legislation. Furthermore, legislation may be strongly preferable to guard against the reforms' quick reversal at the Department of Labor (as has happened to "fiduciary duty" guidance).

D. Modernize Expectations for Investment Fiduciaries.

For ESG disclosures to be effective in changing the behavior of investors and businesses, regulations must be updated first to make clear that ESG factors are material investment considerations and second to establish a framework to ensure that fiduciaries are acting on those considerations. Regulations should allow fiduciaries to respond to ESG factors in the ways they deem appropriate—for example, by buying or selling assets, engaging with issuers, and filing shareholder proposals—provided that material ESG factors are reviewed, analyzed, and acted on.

Federal securities laws, ERISA, commodities laws, and relevant state laws generally do not explicitly mandate investment fiduciaries to take any action to consider ESG-related issues. Fiduciary duties under federal laws should clarify that ESG factors are “pecuniary” or “material” and should compel investment professionals to identify, assess, and address ESG-related risks and opportunities.³⁷

This approach would ensure that investment fiduciaries have policies, procedures, and practices to address ESG-related risks and opportunities. This objective could be achieved by mandating the widespread adoption and implementation of sustainable investment policies.

Generally speaking, several categories of “investment fiduciaries” or other financial participants may potentially warrant a legal obligation to develop, implement, and ensure compliance with sustainable investment policies:

- retirement fiduciaries, including those under ERISA plans (subject to federal labor law);
- investment advisers registered with the SEC (subject to the federal securities laws);
- broker-dealers and other financial intermediaries (subject to federal securities laws);
- retirement fiduciaries, such as state pension plans (subject to state law);
- asset managers that are not registered with the SEC (subject to state law); and
- foundations and other non-profit asset owners (likely subject to federal tax and state law).

This report focuses on federal-level action, but it encourages state-level action in the same general areas.

Recommendations for the SEC

Revising fiduciary obligations for investment advisers and registered investment companies should be a top-of-book priority for the SEC, and it can do so without legislation. However, Congress could also revise the underlying statutes to ensure that the reforms are made more durable.

1. Direct the Division of Investment Management to offer guidance on the importance of investment advisers considering relevant factors and voting in client-identified interests or consistent with beneficiaries’ long-term interests.
2. Propose and adopt a rule under Section 203(c)1(C) under the Investment Advisers Act of 1940 requiring the Form ADV to require investment advisers to adopt and implement sustainable investment policies. Those policies should
 - a. explain how the adviser identifies, assesses, and addresses key ESG areas;
 - b. in addition to integrating all material ESG-related financial information, require advisers to identify ESG preferences of their funds’ beneficiaries and seek to effectuate those preferences;
 - c. be publicly disclosed on form ADV;
 - d. be reviewed and approved at least annually; and
 - e. be audited for compliance.
3. Propose and adopt a rule under the Investment Company Act to require a fund to disclose on its prospectus and statement of additional information how the fund:

³⁷ Other countries’ regulatory regimes are modifying not just fiduciaries’ processes, but also compelling fiduciaries to take specific substantive actions such as mitigating climate impacts. For example, the United Kingdom is actively considering an approach that would include some process requirements (analogous to a sustainable investment policy) as well as some substantive limits. United Kingdom Department of Work and Pensions, *Taking Action on Climate Risk: Improving Governance and Reporting by Occupational Pension Schemes*, Aug. 26, 2020, <https://www.gov.uk/government/consultations/taking-action-on-climate-risk-improving-governance-and-reporting-by-occupational-pension-schemes>.

- a. identifies, assesses, and addresses key ESG issues;
 - b. votes (or doesn't) and otherwise engages with companies of portfolio securities consistent with sustainable investment policies; and
 - c. has been audited for compliance with the policies.
4. Propose and adopt reforms to the “Know-Your-Customer” regime to include seeking information about customers’ ESG-related preferences and periodically “checking in” to ensure those preferences haven’t changed.
 5. Propose and adopt revisions to Reg BI and the “suitability” doctrine. In addition to integrating all material ESG-related financial information, the rules should require brokers to modify their approach to reflect customers’ articulated ESG-related preferences. ESG-related information should include discussions of climate risks, worker diversity, wages and worker power, executive compensation, political spending, and more.

Recommendations for the DOL

The topic of ERISA fiduciaries’ ability to consider ESG factors has been the subject of rules and guidance going back more than 25 years—most recently, the DOL’s Financial Factors in Selecting Plan Investments (the “Fiduciary Rule”), which went into effect in mid-January.³⁸

This rule has created confusion regarding whether plan fiduciaries are permitted to consider ESG factors as part of their investment practice.

6. Issue a non-enforcement directive with respect to the Fiduciary Rule. Clarify that it will not be enforced against plan fiduciaries who consider ESG factors in selecting investments.
7. Issue guidance that clarifies the DOL’s view that ESG factors are “pecuniary” and therefore proper considerations for ERISA fiduciaries. This guidance will mitigate the confusion created by the Fiduciary Rule.
8. Propose and adopt a rule to clarify that ESG factors are material and to require ERISA plan fiduciaries to adopt and implement sustainable investment policies. These policies should
 - a. explain how the fiduciaries identify, assess, and address key ESG areas;
 - b. in addition to integrating all material ESG-related financial information, require plan fiduciaries to identify ESG preferences of their funds’ beneficiaries and seek to effectuate those preferences;
 - c. be reviewed and approved at least annually; and
 - d. be audited for compliance.
9. Propose and adopt a rule to revise or withdraw the recently adopted changes to the DOL’s longstanding “investment duties” rule at 29 CFR 2550.404a-1, which governs ERISA plan proxy voting and other “exercises of shareholder rights.” This rule will create confusion regarding whether ERISA plan fiduciaries may file and vote on shareholder proposals or engage in other shareholder “stewardship” activities to encourage climate-related reporting or mitigation practices.

Recommendations for the CFTC

10. Propose and adopt a rule under the Commodity Exchange Act to require commodity pool operators (CPOs) to adopt and implement sustainable investment policies. Those policies should
 - a. explain how the CPO identifies, assesses, and addresses key ESG issues;
 - b. in addition to integrating all material ESG-related financial information, require CPOs to identify ESG preferences of their funds’ beneficiaries and seek to effectuate those preferences;
 - c. be publicly disclosed on Form ADV;

³⁸ See <https://www.govinfo.gov/content/pkg/FR-2020-11-13/pdf/2020-24515.pdf>.

- d. be reviewed and approved at least annually; and
 - e. be audited for compliance.
11. Propose and adopt a rule to require commodity pools to disclose how they
 - a. identify, assess, and address key ESG issues;
 - b. vote (or don't) and otherwise engage with companies of portfolio securities consistent with sustainable investment policies; and
 - c. are audited for compliance with the policies.
 12. Propose and adopt reforms to the "Know-Your-Customer" regime to require seeking information about customers' ESG-related preferences and periodically checking whether those preferences have changed.

Recommendations for FINRA

FINRA is a self-regulatory organization empowered to take primary responsibility for overseeing broker-dealers. Its rules and actions are subject to SEC review and approval. It has established detailed rules and guidance regarding Know Your Customer (KYC) obligations, sales practices, and more.

13. Propose and adopt reforms to the KYC regime to include seeking information about customers' ESG-related preferences and periodically checking whether those preferences have changed.

Potential Legislation

Each of the above actions could be accomplished through regulatory actions or federal legislation. Rep. Andy Levin (D-MI) is reportedly working on legislation that would require ERISA plan fiduciaries and investment advisers registered with the SEC to adopt, implement, disclose, and test sustainable investment policies. Separately, Senator Tammy Baldwin (D-WI) introduced the EMPOWERS Act that would, among other things, reverse the DOL's rule discouraging proxy voting and make it easier for workers to control how their shares held for retirement are voted.

To date, there is no federal law requiring brokers or other financial intermediaries to identify customers' ESG preferences or have policies related to any ESG-related factors. That should change.

These legislative proposals could and should be merged into a larger package that would ensure that investment fiduciaries governed by federal law are focusing on identifying, assessing, and addressing the long-term best interests of their beneficiaries and society.

At the same time, we encourage federal action to spur states (which oversee state pension plans and smaller advisers) to mirror these efforts. In that regard, California and Illinois could provide helpful models.

E. Increase Reporting for Private Companies and Funds.

Public companies make up an ever-shrinking portion of the U.S. capital markets. Just 4,336 companies were listed at the end of 2017, compared with 6,917 in 2000. During that same timespan, the number of privately owned companies nearly quintupled, from 1,572 to 7,596. This increase is no accident. It results from several significant policy choices adopted by Congress and the SEC.

Both Congress and the SEC have repeatedly created and expanded rules that permit companies to access the capital markets from a large pool of investors without having to register their securities offerings (registration itself is an initial disclosure and triggers ongoing disclosure requirements and investor rights). These exemptions have included creation of Regulation D (and Rule 506 thereunder), Rule 144A, Regulation Crowdfunding, and Regulation A (and Reg A+). The specific requirements for each of these exemptions varies significantly. Interestingly, under some of these exemptions, the SEC may not even know whether a sale occurred. For example, as the SEC was further expanding these exemptions in 2020,

it noted that it had to “estimate” how much capital was raised using them.³⁹ At the same time, Congress and the SEC have rolled back requirements that once could have required most large, thriving private companies to become reporting companies (i.e., Section 12(g)). As a result of these collective changes, the vast majority of securities sold in the United States today (70%) are outside of the SEC’s registration, disclosure, and rights regime.⁴⁰

These changes have profound implications for corporate accountability to shareholders and other stakeholders, including the public. The public disclosure obligations and rights for shareholders demanded by the federal securities laws and rules generally apply to only “public” companies and “registered” investment companies.

We propose revisions to federal securities laws and rules that would ensure that all large companies and funds make essential disclosures, including disclosures of ESG issues. Without these changes, a significant majority of companies will escape reporting and accountability around climate change and climate risk.

Recommendations for the SEC

1. Direct the Division of Economic and Risk Analysis to study private companies’ climate-related practices and relationships to particular financial products (e.g., collateralized loan obligations). The study would be aimed at producing economic analysis to support regulations mandating climate-related financial disclosures by private companies and privately traded financial products.
2. Propose and adopt revision of the definition of “shareholders of record” under Section 12(g) to cover “beneficial owners.”
3. Section 12(g) does not impact capital raises, nor does it force a company to “list” its shares on a stock exchange. However, Section 12(g) does trigger ongoing public reporting obligations once a company registers under the Securities Exchange Act of 1934. When Section 12(g) was initially adopted, the number of shareholders of record correlated closely with the number of beneficial owners. Today, due to a variety of ownership structures, the number of record holders may vastly understate the number of investors with an economic interest in a company’s securities. Consequently, companies can acquire a broad ownership base, with thousands of beneficial owners, yet avoid triggering Section 12(g)’s registration and reporting requirements. Adjusting 12(g) to track beneficial ownership rather than record holders would put the United States more on par with how other jurisdictions identify “large” companies that are subject to a public reporting regime.
4. Propose and adopt revisions to Rule 144A to mandate the same level of disclosure that is required in a public offering (as outlined above). In particular, the SEC should consider mandatory disclosures regarding sales of unregistered securities that may be impacted by climate risks (particularly with respect to debt offerings).

Much of the financing for fossil fuel companies is raised through debt financings under Rule 144A. These securities are often backed by the fossil fuel assets, which means that a cause of credit risk is also likely to reduce the collateral protection from that risk. Thus, as oil and gas fields and equipment decline in value, the firm that issued the securities is less likely to be able to repay the debt, and the collateral securing the debt is also less valuable. This eventuality can expose investors to far greater risk than is readily apparent under the current disclosure regime. It is also worth noting that lack of adequate disclosures in 144A offerings played a significant role in the subprime crisis and led to calls for the repeal of 144A. Unfortunately, credit rating companies generally continue pre-2008 practices of under-appreciating credit exposures in general and leveraged or highly correlated credit exposures in particular, and these challenges are greater when less information is provided by the issuers.

5. Propose and adopt revisions to Rule 506 to mandate disclosures similar to those required in a public offering (as outlined above). Again, the SEC should include mandatory disclosures regarding sales of unregistered securities that may be impacted by climate risks (particularly with respect to debt offerings).

³⁹ See SEC, *Facilitating Capital Formation and Expanding Investment Opportunities by Improving Access to Capital in Private Markets*, at 8, Mar. 4, 2020, <https://www.sec.gov/rules/proposed/2020/33-10763.pdf>.

⁴⁰ See *id.*

6. Propose and adopt revisions to Reg AB to mandate disclosures similar to those required in a public offering (as outlined above).
7. Propose and adopt revisions to Rule 506 that condition the exemption on filing closing Form D on completion of a Regulation D transaction that provides detailed disclosures on basic financials of offering (which would inform the SEC of the offering and provide basic details with respect to it).
 - a. Announce an enforcement initiative regarding failure to file closing Form D (although technically “required” this mandate is inadequately enforced, leaving the SEC without essential information about whether a sale even occurred).
8. Constrict capital raising outside a public disclosure and accountability regime by revising or rescinding the recently adopted reforms to exemptions and integration doctrine. By revising the integration rules related to the different exemptions, the SEC has created a way for sophisticated parties to raise essentially unlimited capital from an unlimited number of public investors without providing disclosures or rights. The SEC’s Office of the Investor Advocate proposed reversing the SEC’s recent changes on integration (along with many other changes) in its 2020 annual report.⁴¹
9. Revise the “accredited investor” definition to constrict the capital raised outside the public disclosure and accountability regime.
10. Propose and issue rules revising the application of exemptions to offering rules for private funds in order to capture funds with more than \$1 billion in assets or more than 100 beneficial owners and require them to register as investment companies subject to quarterly reporting of their investment positions through Form N-Q and Form N-CSR.
11. Propose and adopt a rule under Section 204(b) of the Investment Advisers Act of 1940 requiring data from the Private Fund Climate Risk Disclosure Rule to be reported on Form PF.
12. The Commission should publish aggregated Form PF data.

Potential Legislation

Many of the objectives in addressing the loss of direct accountability due to the rise of the private markets can be addressed through regulatory reforms. But perhaps the single most important change would be to revise the scope of Section 12(g) so that any sufficiently large company would become a public reporting company. This change would not “compel” a firm to engage in an IPO or list its shares on an exchange, but that would be a likely result in many cases. A company should be deemed sufficiently large to warrant Exchange Act reporting obligations if it has

1. revenues above a given threshold (e.g., \$100 million annually);
2. a “market cap” above a threshold (e.g., \$1 billion) based on private market valuations made by (a) the company or (b) the broker, dealer, or investment adviser;
3. a “public float” in various trading venues (e.g., SharesPost or Nasdaq Private Market) above a threshold (e.g., \$75 million, which is the threshold above which a public company becomes an “accelerated filer”);
4. a number of beneficial owners of “securities,” as defined in Section 2(a)(1) of the Securities Act, above a threshold, irrespective of “accredited investor” status (e.g., 500 persons, including employees); or
5. a threshold number of employees (e.g., 500).

⁴¹ Office of Investor Advocate, *Report on Activities Fiscal Year 2020*, Dec. 29, 2020, <https://www.sec.gov/files/sec-investor-advocate-report-on-activities-2020.pdf>.

F. Incorporate Material Climate Information into Accounting Standards.

The U.S. accounting and disclosure regime is outdated. It shields companies from being held accountable for managing climate-related financial risks, and it exacerbates the externalities of climate-related impacts to our economy, society, and the environment.

Although it is founded on the idea that transparency and comparability promote well-functioning capital markets, the current regime ignores material climate information that is critical to investors' capital allocation, investment monitoring, and stewardship. The SEC has also eschewed developments in data analysis that would allow the ecosystem of investors, financial analysts, and other advisors to identify, monitor, and manage climate-related financial risks and mobilize capital for the low-carbon transition. Instead, the SEC has maintained an accounting and disclosure regime that invites companies to present information in a bespoke manner that makes it exceedingly difficult to compare strategies, risks, results, or performance and that is costly and inefficient for markets to use.

The SEC administers the U.S. accounting and disclosure regime by promulgating rules, reviewing corporate filings, and engaging with companies directly to query and improve disclosure that appears confusing or weak. The SEC also oversees the FASB's development of accounting standards and the PCAOB's development of auditing standards. Notably, unlike the funding for the International Financial Reporting Standards Foundation's Sustainability Standards Board, Sarbanes-Oxley provided for independent funding for the FASB and the PCAOB to ensure accounting and auditing independence from accounting firms and issuers. It further required that only accounting principles adopted under the independent funding structure be recognized. When necessary, the SEC also issues general guidance to correct widespread weaknesses in financial reporting and disclosure.

The SEC could immediately begin retooling the accounting and disclosure regime simply by enforcing existing accounting, disclosure, and audit rules to address pervasive material omissions in disclosures. At the same time, some new rules and standards are also advisable, and the SEC could embark on them immediately as well.

Note: International and foreign accounting and auditing standards setters have provided detailed guidance to companies on how climate change and climate-related commitments should be reflected in corporate financial statements.⁴²

Recommendations for the SEC, FASB, and PCAOB

1. The SEC Chair should establish a cross-divisional, cross-agency task force to monitor compliance with existing reporting and auditing requirements, develop guidance as needed, and conduct extensive economic analysis and empirical research to support monitoring and enforcement and to prepare for the rulemakings described above. The task force should be led by the Director of the Office of Climate Risk. The Office of Climate Risk should establish a detailed workplan, meet regularly, and report on milestones for accountability. The task force should include members of the PCAOB and the FASB and the following staff experts:
 - a. SEC—Division of Corporation Finance
 - b. SEC—Office of the Chief Accountant
 - c. SEC—Division of Investment Management
 - d. SEC—Division of Economic and Risk Analysis
 - e. SEC—Office of the General Counsel
 - f. PCAOB—Office of the Chief Auditor
 - g. PCAOB—Division of Registration and Inspection
 - h. PCAOB—Office of Economic and Risk Analysis
 - i. PCAOB—Office of the General Counsel
 - j. FASB—Technical Director and dedicated project leads

⁴² See, e.g., IFRS, Effects of Climate-related Matters on Financial Statements, Nov. 2020, <https://cdn.ifrs.org/-/media/feature/supporting-implementation/documents/effects-of-climate-related-matters-on-financial-statements.pdf>.

2. The SEC should propose and adopt rules to include consideration of the role of the auditor or any third-party assurance provider in reviewing or assuring climate-related disclosures, as appropriate in light of each disclosure (e.g., metrics).
3. The SEC should require investment advisers to obtain third-party assurance on the status of their climate-related disclosures (described above) as mandated pursuant to rules under the Investment Advisers Act.
4. The PCAOB should propose and adopt new auditing standards to
 - a. provide for auditor assurance over new 10K climate-related disclosures (described above);
 - b. provide for auditor assurance over the status of climate-related claims of investment advisers (described above);
 - c. require, as part of financial statements audits and internal control over financial reporting, that auditors test accounts against “baseline” assumptions and estimates and address any inconsistencies with the audit committee and, if not resolved, (i) address the inconsistencies in the audit report and (ii) perform appropriate audit procedures on the reconciliation described above that would be required for companies that do not use Paris Agreement-aligned assumptions;
 - d. provide for appropriate procedures to audit and report on emissions; and
 - e. provide for appropriate procedures to audit financed emissions.
5. The SEC should announce its intention to monitor and enforce compliance with applicable accounting standards in its staff reviews of U.S.-listed companies’ SEC filings, including the following guidance and topics:
 - a. the SEC’s 2010 guidance on climate change (applicable to U.S. and foreign private issuers),
 - b. the SEC’s 2002 and 2003 guidance on critical accounting assumptions (applicable to U.S. and foreign private issuers),
 - c. the IASB’s guidance on climate change (applicable to foreign private issuers and instructive for U.S. issuers),
 - d. asset valuation and impairment (particularly relevant for fossil fuels, transportation, and other industries),
 - e. asset life and depreciation (particularly for long-lived assets and financial products),
 - f. asset retirement obligations (particularly for assets with “long-tail” risks, such as wells or other toxic assets), and
 - g. impact of net-zero, science-based, and other climate-related corporate commitments and evidence of a discernible throughline to companies’ financial reports.
6. The SEC should work with stakeholders, including the Financial Accounting Foundation, the FASB, the PCAOB, and others to develop a coordinated sustainability standards board (SSB), funded through the FASB’s existing funding mechanism, which would build on the disclosure requirements of the CDP, CDSB, GRI, IIRC, and SASB. The SSB should be focused on
 - a. addressing the full range of sustainability factors material to enterprise value creation (e.g., environmental, social, human capital, and governance disclosures);
 - b. developing standards that include quantitative metrics and key performance indicators;
 - c. developing industry-specific standards;
 - d. leveraging existing sustainability frameworks, standards, and processes that have broad capital markets support;
 - e. building a funding model that can sustain high-quality, global standards development;
 - f. developing the relationships and expertise necessary to devise standards for financially material sustainability disclosure, which often requires broader experience and knowledge sets than those used for financial accounting standards development;
 - g. establishing processes to maintain an XBRL taxonomy for sustainability disclosure standards; and
 - h. establishing processes to achieve interoperability with sustainability standards focused on multi-stakeholder communication.

7. The SEC should announce climate-related priorities for inspections of audit firms. It should coordinate with the PCAOB to issue companion inspection priorities for auditors to cover audit planning, testing, reporting, and other matters related to the topics above as well as the following:
 - a. the role of risk assessment in designing the nature and extent of audit procedures, including an understanding of the audit client's internal scenario and other analyses and public reports and statements (e.g., sustainability reports, CDP reports) about the impact of physical and transition risk and
 - b. the auditor's responsibility regarding other information.

Potential Federal Legislation

Legislation is not necessary for the SEC to require more robust climate disclosures or to direct the FASB and the PCAOB to embark on new standard-setting projects. It may, however, be useful to include explicit SEC mandates in connection with broader legislation to ensure the integrity of the disclosures mandated.

G. Address Climate Risk in Municipal Securities.

Even before the pandemic, funding for state and local governments was under extreme stress. Many governments are looking to sell long-dated debt. At the same time, many governments and the communities they serve face growing climate risks, including damage from extreme weather and the loss of tax revenue due to failing industries. Because of these harms, some may experience diminished access to financing, including financing for the transition to a zero-carbon economy and climate-resilient infrastructure.

Although investors in municipal securities face growing credit risk, financial regulatory solutions must not impose additional disadvantages on the low-income and minority communities that already face the worst climate impacts. Financial regulators should convene research activities to find policies that can (1) protect investors and the financial system from climate risk in municipal securities, (2) counteract the uneven distribution of that risk and its concentration in certain municipalities and regions, (3) foster ongoing access to financing for affected communities, and (4) facilitate an affordable transition to a cleaner economy and more resilient built environment for every community.

First-Year Recommendations for Municipal Securities

1. The FSOC climate risk committee (Rec. II.A.2) should convene a roundtable to develop a report on climate risk for municipal securities. Participants should analyze the utility of requiring climate-related disclosures, both to increase municipalities' incentive to improve their climate risk mitigation strategies and to provide an information base for targeted federal investments in climate mitigation and resilience. The FSOC should work with the SEC, the Fed, the FIO, the Municipal Securities Rulemaking Board (MSRB), the White House Environmental Justice Advisory Council, the White House Office of Domestic Climate Policy or National Economic Council, representatives from frontline communities, municipal issuers, insurance companies, and investors to evaluate various disclosure contents, metrics, and formats, with careful consideration of potential perverse outcomes for vulnerable communities, like diminished access to credit and follow-on climate risk made worse by the inability to finance climate-related projects. The report should consider, for example, how disclosure of physical and transition climate risks, spending on climate mitigation and resilience, progress toward Paris Agreement-aligned climate targets, and percentage of tax revenue from vulnerable or clean industries could be used to target federal research and incentives to areas of highest need without diminishing municipalities' access to credit or raising borrowing rates.

H. Adopt Rules Governing Products and Services Offered as “Green.”

Green bonds have taken off. According to Goldman Sachs, \$225 billion were issued in 2019 compared with \$10 billion in 2013, their first year. The rise in these creative financing methods for green initiatives is to be applauded, but concerns have also been growing over whether some bonds are being falsely advertised, a practice often referred to as “greenwashing.” There are still no exact criteria for what constitutes a “green” bond, nor is there an official third party providing any sort of certification.

1. The SEC should propose and adopt rules to require, in a standardized way,
 - a. identification and evaluation of potential financial impacts of physical and transition risks posed to the covered issuer by climate change during the period and any risk management strategies;
 - b. a description of any established governance processes and structures to identify, assess, and manage climate-related risks;
 - c. a description of specific actions that the covered issuer is taking to mitigate identified present and future risks, taking into account different climate scenarios;
 - d. a description of the robustness of the strategy of the covered issuer for addressing climate risks, taking into account different climate scenarios;
 - e. a description of how climate risk is incorporated into the overall risk management strategy of the covered issuer;
 - f. a description of how the issuer of the security is complying (or not) with the commitments of the Paris Agreement; and
 - g. a description of the degree to which the issuer’s climate risks are based on assumptions that are aligned with the Paris Agreement. If risks are not based on assumptions that are aligned with the Paris Agreement, an audited pro forma presentation that is aligned with the Paris Agreement should be provided as a supplemental disclosure.
2. The SEC should require all securities branded and sold as “sustainable,” “ESG,” or “green”—whether registered or unregistered—to disclose their specific policies for determining how their offering qualifies as “green,” using standardized criteria developed in consultation with ICI, asset owners, and other market participants. The SEC should consult with the European Commission’s Technical Expert Group on taxonomy requirements.
3. The SEC should convene a roundtable with the MSRB, municipal issuers, “green bond” issuers, insurance companies, and other “green bond” market participants to evaluate the utility of various disclosure contents and formats.
4. The SEC should propose and adopt revisions to Rule 144A to mandate the same level of disclosure that is required in a public offering (as outlined above).
5. The SEC should revise Rule 506 to mandate disclosures similar to those required in a public offering (as outlined above).
6. The SEC should propose and adopt a rule to require all securities branded and sold as “sustainable,” “ESG,” or “green”—regardless of whether they are registered—to receive independent, third-party certification of “green” status.
7. The SEC should propose and adopt a similar rule for funds branded or sold as “sustainable,” “ESG,” or “green.” It should revise and adopt a fund naming rule that builds on the work of the Investment Company Institute.
8. The SEC should require all index providers that classify “sustainable,” “ESG,” or “green” products to disclose their specific evaluation and classification policies and metrics, using standardized criteria developed in consultation with ICI, asset owners, and other market participants. It should consult with the European Commission’s Technical Expert Group on taxonomy requirements. Indexes claiming a “green” or “climate” focus should have criteria supporting that assertion.

I. Require Rating Agencies to Incorporate Climate Considerations into Credit Ratings and to Publish Their Methodologies.

Credit rating firms—the largest being DBRS Morningstar, Fitch Ratings, Moody’s Investors Service, and S&P Global Ratings—serve as important intermediaries in the debt markets, purportedly providing standardized grades on a debt that reflects its riskiness to investors. Currently, however, credit rating methodologies related to climate and other exposures are typically articulated so vaguely that they can allow almost any credit rating outcome.

In addition, credit ratings firms often inflate initial ratings, and these inflated ratings may persist until an event triggers a massive reconciliation, usually in the form of a downgrade. The “issuer pays” model is problematic because ratings firms have an incentive to compete for business by providing higher ratings.

In recent years, some investors have taken significant credit losses related to external shocks, including the coronavirus and natural disasters. In the lead-up to those losses, the credit ratings on the securities—much like the ratings for a range of bonds, including but not limited to mortgage-backed securities prior to the 2008 financial crisis—often did not reflect risks associated with these shocks. Once such shocks are acknowledged, the rating agencies tend to downgrade securities en masse, and relatively indiscriminately, which can lead to further pricing shocks.

Importantly, it appears that in response to the coronavirus crisis, ratings on some products (such as debt underpinning collateralized loan obligations) may be starting to be subject to stress testing or scenario analysis methodologies.

1. The SEC Office of Credit Ratings should adopt a rule requiring credit rating firms to adopt, integrate, and publish policies on how they consider climate-related risks in their credit ratings.
 - a. These policies should consider physical and transition risks to issuers that may impact the risk of the rated securities, including, for example, for corporate issuers and facilities and assets committed to regions with high or extremely high baseline water stress or high or extremely high potential for storms or fire.
 - b. For banks, these assessments should cover climate-related risks in loan and investment portfolios as well as funding risks.
 - c. For insurance companies, these assessments should cover climate-related risks in underwriting and investment portfolios as well as funding risks.
 - d. For asset backed securitizations, ratings agencies should consider impacts on repayments under climate-stressed scenarios outlined by the Paris Agreement.
2. The SEC should deny applications for registration to rate new classes of non-credit securities under 17 CFR § 240.17g-1 if it determines that the credit rating agency has ever issued ESG ratings for any class of securities that were arbitrary or misleading or that lacked a comprehensive methodology.

Potential Federal Legislation

The Biden Administration should consider asking Congress to establish a public credit rating agency that would establish robust climate-related scenarios. It should also ask Congress to statutorily permit the SEC to prohibit credit rating agencies from issuing non-credit ESG ratings.

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