



February 6, 2023

SUBMITTED VIA EMAIL

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Board of Governors of the Federal Reserve System
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Re: Principles for Climate-Related Financial Risk Management for Large Financial Institutions (Docket No. OP-1793)

To Whom It May Concern:

Environmental Defense Fund (“EDF”) and the Institute for Policy Integrity at NYU School of Law (“Policy Integrity”)¹ respectfully submit the following comments to the Board of Governors of the Federal Reserve System (“Board”) in response to its request for feedback regarding its *Principles for Climate-Related Financial Risk Management for Large Financial Institutions*, published on December 8, 2022 (the “Draft Principles”).²

One of the world’s leading international nonprofit organizations, EDF creates transformational solutions to the most serious environmental problems. To do so, EDF links science, economics, law, and innovative private-sector partnerships. Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.

EDF and Policy Integrity support the Draft Principles as an important step in the Board’s efforts to guide banks to update their risk management practices as needed in light of climate-related financial risks, thereby promoting safety and soundness. We recommend that the Board continue building upon these Draft Principles with final guidance, as it has indicated it plans to do, moving expeditiously and in coordination with other regulators working to address climate-related financial risk, including the Office of the Comptroller of the Currency (“OCC”) and the

¹ These comments do not necessarily reflect the views of NYU School of Law, if any.

² Bd. of Governors of the Fed. Res. Sys., *Principles for Climate-Related Financial Risk Management for Large Financial Institutions*, 87 Fed. Reg. 75,267 (Dec. 8, 2022) [hereinafter “Draft Principles”].

Federal Deposit Insurance Corporation (“FDIC”). We offer the following recommendations to help inform that process:

- I. The Board should consider offering more detailed guidance regarding the physical and transition risks that affect the management of various risk areas.
- II. The Board should consider guiding banks on the use of relevant, accurate, and timely climate-related data for risk management and reporting.
- III. The Board should consider requiring banks to incorporate climate risk into regulatory reports and leveraging other entities’ work on climate-related disclosures.
- IV. In designing and executing scenario analyses, the Board should consider defining orderly transition, disorderly transition, and hot-house scenarios, setting at least a thirty-year analysis period, and accounting for the correlated nature of risks.
- V. The Board should consider how to mitigate potential harm to disadvantaged communities from banks’ climate risk management strategies.

I. The Board should consider offering more detailed guidance regarding the physical and transition risks that affect the management of various risk areas.

Although the Draft Principles provide an outline of how banks should approach managing climate risk within their portfolios, they could be buttressed with additional insight into what types of risks may manifest themselves.³ More detailed examples may help banks to identify, assess, and manage climate-related financial risks more comprehensively, particularly any banks that are at early points on the learning curve on climate risk. The Board notes that it “intend[s] to work with the OCC and the FDIC to provide guidance to large banks on how [it] expect[s] them to identify, measure, monitor, and manage the financial risks of climate change.”⁴ We support the Board’s intent to issue final interagency guidance, recommend that the Board make this further guidance publicly available, and provide a non-exhaustive list of additional considerations it should include. In addition, we encourage the Board to more clearly highlight climate-related market risk, discuss the interconnectedness of these risk areas, and include private governance initiatives as an area of non-financial risk.

Climate-related financial risk is generally divided into two broad categories: physical risks and transition risks.⁵ Physical risks include the damages wrought by wildfires, flooding, extreme heat, and other direct results of climate change.⁶ Transition risks are the costs associated with societal shifts in response to climate change, such as those from technological and policy

³ Draft Principles, *supra* note 2, at 75,267–68.

⁴ Federal Reserve System Vice Chair for Supervision Michael Barr, Address at the Brookings Institution, Washington D.C. (Sept. 7, 2022) (transcript available at <https://www.federalreserve.gov/newsevents/speech/barr20220907a.htm>).

⁵ See, e.g., Madison Condon et al., *Mandating Disclosure of Climate-Related Financial Risk*, 23 N.Y.U. J. LEGIS. & PUB. POL’Y 745, 749 (2020-21) <https://perma.cc/G3Z3-8GKY>.

⁶ *Id.* at 749–55.

changes, changing consumer sentiment, and liability for climate damages.⁷ Typical bank portfolios exhibit both physical and transition risks. The Board briefly discusses how some of these risks may affect banks in the introduction to the Draft Principles.⁸

The Board identifies the following risk management areas in its Draft Principles: credit risk, liquidity risk, other financial risk (including price and interest rate risks), operational risk, legal/compliance risk, and other non-financial risk.⁹ Additional guidance explicitly outlining the types of climate-related risks relevant to each risk management area would set clearer expectations for the scope of banks' risk assessments and make it more likely that banks acquire the tools necessary to assess the climate risks in their portfolios.¹⁰ While climate risks are similar to other types of financial risks, it is also the case that "the nature of climate risks is less familiar to financial institutions."¹¹ Financial institutions are still building the expertise needed to identify potential climate risks and providing more tailored guidance will ensure that banks are on the right track.

A. The Board should consider clarifying how climate-related credit risk implicates both an obligor's ability to pay a loan, as well as risk to the underlying collateral.

The Board should consider providing examples of the types of credit risk that banks should review in risk assessments. In particular, the Board could demonstrate ways climate change could either reduce an obligor's ability to pay or cause damage to the underlying collateral, increasing a bank's losses in the case of default. Currently, the Draft Principles focus most closely on the risks associated with credit concentration within a particular market or region.¹² While these risks are important and bear discussion, other portfolio risks could also be made clear.

The Board defines credit risk as "the risk that a borrower will not repay a loan."¹³ The magnitude of this risk depends on both the likelihood that the obligor will pay their debt and the value the bank can recover if the obligor fails to do so. In other words, credit risk responds

⁷ *Id.* at 755–59.

⁸ Draft Principles, *supra* note 2, at 75,267-68.

⁹ *Id.* at 75,270-71.

¹⁰ For a careful analysis of how climate-related financial risks intersect with each risk management category, please also refer to Amer. Fin. Reform Educ. Fund et al., Recommendations for Supervisory Guidance from Bank Regulators (Sept. 2021), <https://www.nrdc.org/sites/default/files/supervision-guidance-climate-risk-202109.pdf>.

¹¹ FIN. STABILITY OVERSIGHT COUNCIL, REPORT ON CLIMATE-RELATED FINANCIAL RISK 24 (2021), <https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf> [hereinafter "FSOC Climate Report"].

¹² Draft Principles, *supra* note 2, at 75,270-71.

¹³ *Credit and Liquidity Programs and the Balance Sheet*, BD. OF GOVERNORS OF THE FED. RES. SYS., https://www.federalreserve.gov/monetarypolicy/bst_riskmanagement.htm (last visited Jan. 16, 2023); *see also Supervisory Policy and Guidance Topics—Credit Risk*, BD. OF GOVERNORS OF THE FED. RES. SYS., https://www.federalreserve.gov/supervisionreg/topics/credit_risk.htm (last visited Jan. 16, 2023) (stating that "[c]redit risk arises from the potential that a borrower or counterparty will fail to perform an obligation") [hereinafter "Supervisory Policy and Guidance"].

both to the creditworthiness of the obligor and to changes in the value of the underlying collateral. Climate risk is present in both considerations.

There are myriad reasons why climate-related risks could decrease the probability of debt repayment. For example, as the world transitions to a low- or zero-carbon economy, a fossil-fuel company may abandon certain projects—a transition risk. Similarly, new environmental regulations—such as the regulation of methane emissions—could make fossil fuels less profitable. Physical risks could mean that a company dependent on physical outdoor labor could have diminished productivity with increasing incidences of extreme heat. An agricultural company might face reduced crop yields, and chronic climate risks such as increased frequency and severity of droughts could decrease land values, which serve as collateral in agricultural operating loans.¹⁴ Banks should weigh risks like these when assessing the creditworthiness of a debtor.

Additionally, a failure to contemplate physical and transition risks may mean that the collateral underlying a loan is overvalued. Consider, for example, a home in California in a wildfire-prone area. If the home burns down—a physical risk—the value of the collateral is severely reduced. Even absent a fire, the looming specter of this risk could cause a home to lose value if, for example, insurers are no longer willing to cover the risk of wildfires or if consumers have concerns about living in wildfire-prone areas.¹⁵

In assessing a bank’s safety and soundness, the Board already considers a bank’s underwriting practices with regards to the sufficiency of collateral and creditworthiness of obligors.¹⁶ The climate’s impact on credit risk is an aspect of these traditional concerns. By providing illustrative examples of credit risks, the Board can ensure these risks receive sufficient due diligence.

B. The Board should consider providing more detail on the types of climate-related liquidity risks a bank may face.

While the Board properly includes liquidity risk as a category to be considered in risk assessments, additional detail would be useful. The Board should consider clearly laying out examples of climate-related liquidity risks and also describe how liquidity risks may

¹⁴ See ENV’T DEF. FUND & DELOITTE, THE IMPACTS OF CLIMATE CHANGE ON AGRICULTURAL FINANCE 11 (2022), <https://business.edf.org/files/impacts-climate-change-agricultural-finance-survey.pdf>.

¹⁵ See Jay Feinman, *What Is a Protection Gap? Homeowners Insurance as a Case Study*, 27 CONN. INS. L.J. 82, 95–96 (2020) (describing how insurers are moving away from wildfire coverage, creating challenges for homeowners in wildfire-prone areas); Martha C. White, *Extreme Weather and Rising Insurance Rates Squeeze Retirees*, N.Y. TIMES (Feb. 4, 2022), <https://www.nytimes.com/2022/02/04/business/retirement-climate-change-homeowners-insurance.html>.

¹⁶ See, e.g., Supervisory Policy and Guidance, *Risk Management and Underwriting*, *supra* note 13, at SR 98-25 (SUP) (section last updated Feb. 26, 2021).

exacerbate—or be exacerbated by—operational and market risk.¹⁷ Liquidity risks may materialize when there is reduced buyer interest in particular assets. For example, societal movement away from fossil fuels could result in stranded assets, posing liquidity issues for banks invested in these assets.¹⁸

C. *The Board should consider providing additional detail on market risk and suggesting acceptable measurement methods for such risk.*

The Draft Principles section on “Other Financial Risk” discusses interest and price risk—components of market risk.¹⁹ The Board notes that there are challenges with existing methodologies to estimate these risks and therefore advises banks to “use the best measurement methodologies reasonably available to them.”²⁰ The Board should consider treating market risk more explicitly within the Draft Principles and suggesting an array of acceptable measurement methodologies.

Market risk—the risk that an institution’s investments lose value—is a significant avenue for climate-related financial risk. Physical risks, for example, can threaten commodities, such as agricultural products, which could affect future values.²¹ Transition risks can also affect investment value. For example, policy or technology changes that align the U.S. energy system with a carbon-zero future could lead to declines in the oil market;²² given the global nature of the oil market, policy or technology changes in other parts of the world could lower demand for oil as well.²³ The Board could provide further explanation of risks like these.

The Securities and Exchange Commission’s (“SEC”) proposed regulations on climate-related disclosures, when finalized, should assist banks in considering climate risks as they make certain types of investments.²⁴ Other jurisdictions and standard-setting bodies have likewise made

¹⁷ Nahiomy Alvarez et al., *A New Framework for Assessing Climate Change Risk in Financial Markets*, 448 CHICAGO FED. LETTER (Nov. 2020), <https://www.chicagofed.org/publications/chicago-fed-letter/2020/448> (noting that “typically, climate change risk is unlikely to make an asset less liquid without making the asset lose value, making a borrower insolvent, or disrupting financial infrastructure”).

¹⁸ See Drew Riedl, *Why Market Actors Fuel the Carbon Bubble: The Agency, Governance, and Incentive Problems that Distort Corporate Climate Risk Management*, J. SUSTAINABLE FIN. & INV. (June 1, 2020), <https://www.tandfonline.com/doi/full/10.1080/20430795.2020.1769986> (“A significant portion of fossil fuel assets will eventually become ‘stranded’ – prematurely obsolete over their expected lives.”).

¹⁹ Draft Principles, *supra* note 2, at 75,270.

²⁰ Draft Principles, *supra* note 2, at 75,270.

²¹ See FSOC Climate Report, *supra* note 11, at 108–12.

²² *Id.* at 110–12.

²³ See BIS, BASEL COMM. ON BANKING SUPERVISION, CLIMATE-RELATED RISK DRIVERS AND THEIR TRANSMISSION CHANNELS 24 (Apr. 2021), <https://www.bis.org/bcbs/publ/d517.pdf> (noting that “countries, regions and sectors are exposed to different levels of transition risk depending on the likelihood of policy action, technological innovation or broad shifts in sentiment within a particular jurisdiction”); see, e.g., Press Release, Council of the European Union, EU climate action: provisional agreement reached on Carbon Border Adjustment Mechanism (CBAM) (Dec. 13, 2022), <https://www.consilium.europa.eu/en/press/press-releases/2022/12/13/eu-climate-action-provisional-agreement-reached-on-carbon-border-adjustment-mechanism-cbam/>.

²⁴ See generally Sec. & Exch. Comm’n, The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21,334 (Apr. 11, 2022).

progress on initiatives to increase the consistency, comparability, and reliability of climate-related disclosures.²⁵ In turn, this should make it easier for banks to conduct thorough assessments of market risk. However, some assets may not be subject to these regulations. Municipal bonds, for example, are not subject to SEC reporting requirements,²⁶ though the Municipal Securities Regulation Board (“MSRB”) is working to determine how best to uncover greenwashing practices in the municipal bond market.²⁷ In October 2021, a Financial Stability Oversight Council (“FSOC”) report detailed how climate-related financial risks affect the mandates of its member agencies and recommended actions to address these risks.²⁸ Since then, FSOC has worked closely with its members to advance recommendations on addressing climate risk in the financial sector, particularly in the areas of capacity building, disclosure, data, and risk assessment.²⁹ According to a June 2022 analysis, nine FSOC member agencies had taken over 230 public actions to address climate-related financial risk, including progress by the SEC, MSRB, Commodity Futures Trading Commission, Federal Housing Finance Agency, and Treasury Department on improving climate-related disclosures.³⁰ The Board should remain abreast of its fellow agencies’ work in this area.

These market considerations are within the ambit of risks that banks should already be considering. Bank supervisors already assess the “degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a financial institution’s earnings or economic capital.”³¹ The Draft Principles nevertheless serve as a critical reminder that the climate crisis will likely affect these prices in a tangible way and that these climate risks must be contemplated. Adding more detail could help ensure that banks properly consider these risks and incorporate them into their core risk management frameworks.

²⁵ See, e.g., *Climate-related Disclosures: Current Stage*, IFRS (2022) <https://www.ifrs.org/projects/work-plan/climate-related-disclosures/> (noting that the International Sustainability Standards Board (“ISSB”) proposed standards for climate related disclosures are expected to form a comprehensive global baseline of sustainability-related disclosures “designed to meet the information needs of investors in assessing enterprise value”); *TCFD-Task Force on Climate-related Financial Disclosures*, UNEP (2022) <https://www.unepfi.org/climate-change/tcfd/> (explaining that the TCFD was created to develop consistent climate-related financial risk disclosures for use by companies, banks, and investors in providing information to stakeholders); *Mandatory Climate-related Disclosures*, MINISTRY FOR THE ENVIRONMENT (2022) <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/mandatory-climate-related-financial-disclosures/> (noting that New Zealand’s government has passed legislation making climate-related disclosures mandatory for some organizations, including large publicly listed companies, insurers, banks, non-bank deposit takers and investment managers).

²⁶ FSOC Climate Report, *supra* note 11, at 87; see also Parker Bolstad et al., *Flying Blind: What Do Investors Really Know About Climate Change Risks in the U.S. Equity and Municipal Debt Markets?* 4–5 (Hutchins Ctr. On Fiscal & Monetary Pol’y at Brookings, Working Paper No. 67, 2020), <https://perma.cc/8VZH-FWFO>.

²⁷ See *Request for Information on Environmental, Social and Governance (ESG) Practices in the Municipal Securities Market*, MUNI. SEC. REG. BOARD (Dec. 8, 2021), <https://www.msrb.org/-/media/Files/Regulatory-Notices/RFCs/2021-17.ashx??n=1>.

²⁸ See generally FSOC Climate Report, *supra* note 11.

²⁹ *Financial Stability Oversight Council Releases Factsheet on Climate-Related Financial Risk Efforts*, U.S. DEP’T OF THE TREASURY (Jul. 28, 2022), <https://home.treasury.gov/news/press-releases/jy0894>.

³⁰ *2022 Climate Risk Scorecard*, CERES, <https://ceres.org/accelerator/regulation/scorecard> (last visited Jan. 17, 2023).

³¹ Risk Management Manual, *supra* note 13, at 1.1-28 (section last updated March 2022).

D. The Board should consider describing third-party operational risk in more detail.

The Draft Principles provide some detail on how climate change could exacerbate operational risks. Additional concrete examples, demonstrating the range of risks, could be helpful, particularly regarding third-party risk. Even if a bank’s operation centers do not themselves face climate risk, if they depend on at-risk infrastructure—such as sanitation and power grids—the risk inherent in that infrastructure propagates to the business operations. While Hurricane Sandy caused evacuation orders that directly shuttered many Wall Street banks, in February 2021, it was failures in the Texas electricity grid that forced banks to close branches.³² In our interdependent world, it is not sufficient to consider only the risk associated with a particular parcel of land; banks must also consider how third-party risk enters the system. While the Draft Principles mention “material third-party operations” as a source of risk,³³ making these connections more explicit will encourage banks to create more robust plans.

E. The Board should consider more explicitly describing how legal and compliance risk interplay with other forms of risk.

While the Draft Principles currently discuss legal and compliance risk, the Board should consider expanding the discussion to describe the interconnectedness between legal risk and other types of risk. For example, the Board flags “changes to legal requirements for . . . flood or disaster-related insurance” as an area of potential legal or compliance risk.³⁴ While changes to these legal requirements would pose a compliance risk for a bank, it is also the case that changes in insurance requirements could pose a *credit* risk, particularly given that property and casualty insurance terms are often only a few years long—shorter than many loan terms.³⁵

F. The Board should consider including private governance initiatives as a sub-category when discussing other non-financial risk.

The Board notes that banks should consider other non-financial risks arising from their strategic decisions and operating environment. In addition to these risks, the Board should also consider explicitly mentioning the potential for private governance initiatives,³⁶ including investor pressure. Member banks of the Net-Zero Banking Alliance have committed to align their assets

³² See Laura Alix, *Blackouts, Deep Freeze Force Texas Banks to Shutter Branches*, AMER. BANKER (Feb. 17, 2021), <https://www.americanbanker.com/news/blackouts-deep-freeze-force-texas-banks-to-shutter-branches>; John McCrank & Caroline Humer, *Stock Markets Closed as Storm Hobbles New York*, REUTERS (Oct. 28, 2012), <https://www.reuters.com/article/us-storm-sandy-markets/stock-markets-closed-as-storm-hobbles-new-york-idUSBRE89ROAV20121029>.

³³ Draft Principles, *supra* note 2, at 75,270.

³⁴ *Id.*

³⁵ See Antonio Grimaldi et al., *Climate Change and P&C Insurance: The Threat and the Opportunity*, MCKINSEY & CO. (Nov. 19, 2020), <https://perma.cc/D6Z4-CHK4>.

³⁶ See Michael P. Vandenberg, *Disclosure of Private Environmental Governance Risks*, 63 WM. & MARY L. REV. 1695 (2022), <https://scholarship.law.wm.edu/wmlr/vol63/iss5/6/> (analyzing transition risks stemming from the pressures that private environmental governance initiatives can create for companies).

and liabilities with a pathway to a net-zero carbon emission earth by 2050.³⁷ It is possible that banks that have not made such commitments will face investor pressure to do so and, on the other hand, that the banks that have committed will be held to those commitments by shareholders. In either case, banks should be aware of their position within the net-zero commitment landscape.

II. The Board should consider guiding banks on the use of relevant, accurate, and timely climate-related data for risk management and reporting.

As the Board recognizes in its Draft Principles, “[s]ound climate-related financial risk management depends on the availability of timely, accurate, consistent, complete, and relevant data.”³⁸ The Board should consider guiding banks on best practices regarding sources and analytical methods for climate risk data.

Banks should use data both from counterparties and from public sources to develop a comprehensive picture of their climate-related risk exposure. With transactional counterparties, banks should solicit information regarding risks to the particular assets or activities involved in the transaction, as well as risks to the counterparty’s creditworthiness generally.³⁹ In order to ensure quality and consistency, the Board could also guide banks on reliable sources and proper uses of various types of publicly available data, such as climate-related disclosures, climate projections, and climate-related financial risks. High-quality data should be incorporated as relevant into identification, measurement, management, and disclosure of climate risks.

To efficiently develop rigorous and consistent climate data practices, the Board should consider ways to coordinate with other regulators working to address climate risks, as well as other experts and stakeholders. The Board’s membership in FSOC, which has commenced work on climate risk issues including data,⁴⁰ as well as in the Federal Financial Institutions Examination Council (“FFIEC”), provide important opportunities for coordination among U.S. financial regulators generally and banking regulators specifically. Given the global nature of both the financial system and climate risks, continued participation by the Board in the Network for Greening the Financial System (“NGFS”)⁴¹ and the Basel Committee on Banking Supervision

³⁷ *Net-Zero Banking Alliance*, U.N. ENV’T PROGRAMME, <https://www.unepfi.org/net-zero-banking/commitment/> (last visited May 23, 2022); *Members*, U.N. ENV’T PROGRAMME, <https://www.unepfi.org/net-zero-banking/members/> (last visited May 23, 2022).

³⁸ Draft Principles, *supra* note 2, at 75,270.

³⁹ Cf. Env’t Def. Fund & Initiative on Climate Risk and Resilience Law, Comments on Federal Acquisition Regulation: Minimizing the Risk of Climate Change in Federal Acquisitions (Jan. 13, 2022), https://www.icrrl.org/files/2022/01/EDF_ICRRL_Comment-Letter-re-Minimizing-the-Risk-of-Climate-Change-in-Federal-Acquisitions-FAR-Case-2021-016.pdf (providing recommendations on minimizing climate-related financial risks in the federal procurement process).

⁴⁰ FSOC Climate Report, *supra* note 11, at 47–66.

⁴¹ See *NGFS Publications*, NETWORK FOR GREENING THE FIN. SYS., <https://www.ngfs.net/en/liste-chronologique/ngfs-publications> (last visited May 23, 2022).

("BCBS")⁴² will also be important. Finally, the Board can benefit from communication with other agencies with expertise in climate-related data, like the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and the National Aeronautics and Space Administration, including through structures like interagency working groups.

III. The Board should consider requiring banks to incorporate climate risk into regulatory reports and leveraging other entities' work on climate-related disclosures.

The Board should consider requiring banks to incorporate climate risk into the disclosures made in their quarterly Consolidated Reports of Condition and Income ("call reports") and any other regulatory reports where such information is relevant. Requiring public disclosures by regulated entities of climate-related financial risks can spur better risk identification and management practices by those entities, as well as provide benefits for regulators, investors, the market, and the general public. In designing these requirements, the Board can leverage existing and forthcoming work by other regulators, entities, and experts on disclosure of climate-related financial risk.

Call reports are a core source of data for safety and soundness supervision, and the Board should consider how these reports can be updated to reflect climate-related financial risks to banks. As the Board states, banking regulators use reporting forms "to collect data from bank holding companies, depository institutions, other financial and nonfinancial entities, and consumers."⁴³ The FFIEC provides instructions on preparation of call reports.⁴⁴ Updating these instructions with details on where and how to incorporate climate risk into a call report will benefit both the reporting entities and the users of reported information.⁴⁵ Standardizing disclosures helps to ensure that they are comparable, specific, and decision-useful.⁴⁶

Disclosing climate risk information publicly in a clear, standardized manner, such as through call reports,⁴⁷ benefits multiple stakeholders.⁴⁸ As explained by FSOC, "[r]egulatory reports assist the federal banking agencies in fulfilling their supervisory mandates, and assist the public, state

⁴² See *Principles for the Effective Management and Supervision of Climate-Related Financial Risks*, BIS, BASEL COMM. ON BANKING SUPERVISION, <https://www.bis.org/bcbs/publ/d530.htm> (last visited May 23, 2022).

⁴³ *Reporting Forms*, BD. OF GOVERNORS OF THE FED. RES. SYS., <https://www.federalreserve.gov/apps/reportingforms> (last visited Jan. 16, 2023).

⁴⁴ See *Bank Call Report Information*, FED. DEPOSIT INS. CORP., <https://www.fdic.gov/resources/bankers/call-reports/index.html> (last visited May 23, 2022) (providing current FFIEC forms and instructions).

⁴⁵ See OFF. OF THE COMPTROLLER OF THE CURRENCY, REGULATORY REPORTING, COMPTROLLER'S HANDBOOK 2 (Sept. 2021) <https://www.occ.gov/publications-and-resources/publications/comptrollers-handbook/files/review-regulatory-reports/pub-ch-regulatory-reporting.pdf> ("The FFIEC publishes detailed instructions to help filers and users understand the items being reported. . . . The FFIEC periodically updates the instructions to reflect changes and for clarity.").

⁴⁶ See Condon et al., *supra* note 5, at 757.

⁴⁷ See *Bank Financial Reports*, FED. DEPOSIT INS. CORP., <https://www.fdic.gov/resources/bankers/bank-financial-reports/index.html> (last visited May 23, 2022) ("Call Report data are also used by the public, state banking authorities, researchers, bank rating agencies, and the academic community.").

⁴⁸ See Condon et al., *supra* note 5, at 772-77 ("Improved Disclosure Regulations Will Benefit Corporations, Investors, Markets, and Society").

banking authorities, researchers, and bank rating agencies in understanding the condition of the banking sector.”⁴⁹ Mandating disclosures would benefit banks by compelling them “to engage in careful and systematic analyses of their exposures to climate risk, preventing them from ignoring worst-case scenarios or unfavorable information,” while also addressing the collective action problems and mismatched incentives that dissuade voluntary disclosures.⁵⁰ Access to improved climate risk information benefits investors, who can better align their investment decisions with their objectives, which in turn helps the market avoid the destabilizing effects of a burst “climate bubble.”⁵¹ Given the role climate-related disclosures can play in preventing economic crises and internalizing externalities, the greater public also benefits.⁵²

Many other entities, including other regulators, NGOs, and IGOs, have already developed climate-related disclosures that the Board can leverage to the extent that they are relevant in this context. The Board should continue to engage as a member of and draw from the climate risk disclosure resources developed by FSOC, NGFS,⁵³ and BCBS.⁵⁴ The BCBS climate risk principles include guidelines specifically for examiners as well as for banks, an approach that the Board should consider for its subsequent guidance.⁵⁵ Among U.S. federal regulators, the SEC has made the most progress to date, with a rulemaking on climate-related disclosure standards currently underway. In addition to looking to the SEC’s approach itself, the Board can analyze the voluminous materials on climate disclosures that various experts submitted in response to the SEC’s March 2021 request for public input⁵⁶ and its March 2022 proposed rule.⁵⁷ Many of those submissions (and the SEC’s proposed rule) highlighted the work of voluntary disclosure regimes like the Task Force on Climate-Related Financial Disclosures⁵⁸ (“TCFD”) and the industry-specific Sustainability Accounting Standards Board standards (including for financial institutions),⁵⁹ which could likewise be useful resources for the Board. The International Sustainability Standards Board (“ISSB”) has proposed requirements for climate-related disclosure that likewise build upon the recommendations of the TCFD, and

⁴⁹ FSOC Climate Report, *supra* note 11, at 73.

⁵⁰ See Condon et al., *supra* note 5, at 773-74.

⁵¹ See *id.* at 28–30; see also Jack Lienke & Alexander Song, Assessing the Costs and Benefits of Mandatory Climate Risk Disclosure 12–13 (2022), https://policyintegrity.org/files/publications/Climate_Risk_v3_%281%29.pdf; see generally Madison Condon, *Market Myopia’s Climate Bubble*, 2022 UTAH L. REV. 63 (2022).

⁵² See Condon et al., *supra* note 5, at 31.

⁵³ See *NGFS Publications*, NETWORK FOR GREENING THE FIN. SYS. (last visited Jan. 26, 2022), <https://www.ngfs.net/en/liste-chronologique/ngfs-publications>.

⁵⁴ See BIS, BASEL COMM. ON BANKING SUPERVISION, PRINCIPLES FOR THE EFFECTIVE MANAGEMENT AND SUPERVISION OF CLIMATE-RELATED FINANCIAL RISKS (Nov. 2021), <https://www.bis.org/bcbs/publ/d530.pdf>.

⁵⁵ See *id.*

⁵⁶ See *Comments on Climate Change Disclosures*, SEC. & EXCH. COMM’N (last visited May 23, 2022), <https://www.sec.gov/comments/climate-disclosure/cll12.htm>.

⁵⁷ See *Comments for The Enhancement and Standardization of Climate-Related Disclosures for Investors*, SEC. & EXCH. COMM’N (last visited May 23, 2022), <https://www.sec.gov/comments/s7-10-22/s71022.htm>.

⁵⁸ TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, <https://www.fsb-tcf.org/> (last visited Jan. 26, 2022).

⁵⁹ *Examples of SASB’s Industry-Specific Approach*, VALUE REPORTING FOUNDATION, SASB STANDARDS (last visited Jan. 26, 2022), <https://www.sasb.org/industry-specific/>.

include requirements for the disclosure of material information about a company's significant sustainability-related risks.⁶⁰

Banking regulators in other jurisdictions both internationally, like the European Central Bank ("ECB"),⁶¹ and sub-nationally in the United States, like the New York Department of Financial Services,⁶² have also taken substantial steps on disclosure of climate risk by regulated entities. The Board may also consider consulting with other types of state regulators that administer reporting or disclosure requirements relevant to certain climate-related physical or transition risks, including greenhouse gas emissions. The Texas Commission on Environmental Quality, for example, could provide valuable information on methane disclosure from the oil and gas sector. Furthermore, convening structures for banking industry participants like the Climate Financial Risk Forum⁶³ and the UN Environment Programme Finance Initiative⁶⁴ have produced multiple reports and guides reflecting the industry's views on best climate risk practices.

IV. In designing and executing scenario analyses, the Board should consider defining orderly transition, disorderly transition, and hot-house scenarios, setting at least a thirty-year analysis period, and accounting for the correlated nature of risks.

The Board rightly recognizes scenario analysis as a helpful tool for identifying and managing climate-related financial risks in the banking system, both in its Draft Principles and in its announcement of a pilot climate scenario analysis exercise.⁶⁵ Beyond this pilot exercise, additional climate scenario analyses both within individual banks and across the banking system will be needed to comprehensively assess climate-related risks. A number of other jurisdictions

⁶⁰ *Climate-related Disclosures: Current Stage*, IFRS (2022) <https://www.ifrs.org/projects/work-plan/climate-related-disclosures/>.

⁶¹ See generally EUROPEAN CENT. BANK, BANKING SUPERVISION, GUIDE ON CLIMATE-RELATED AND ENVIRONMENTAL RISKS, SUPERVISORY EXPECTATIONS RELATING TO RISK MANAGEMENT AND DISCLOSURE (Nov. 2020), <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.202011finalguideonclimate-relatedandenvironmentalrisks~58213f6564.en.pdf>; ECB Sets Deadlines for Banks to Deal with Climate Risks, EUROPEAN CENTRAL BANK (Nov. 2, 2022) <https://www.bankingsupervision.europa.eu/press/pr/date/2022/html/ssm.pr221102~2f7070c567.en.html> (noting ECB deadline for banks to progressively meet all supervisory expectations by the end of 2024, including: (1) adequately categorizing climate and environmental risks; (2) adding climate and environmental risks into their governance, strategy, and risk management; and (3) fully integrating into the Internal Capital Adequacy Assessment Process and stress testing).

⁶² See *Climate Change*, N.Y. STATE DEP'T OF FIN. SERVS. (last visited May 23, 2022), https://www.dfs.ny.gov/industry_guidance/climate_change.

⁶³ *Climate Financial Risk Forum*, BANK OF ENGLAND (last visited May 23, 2022), <https://www.bankofengland.co.uk/climate-change/climate-financial-risk-forum>.

⁶⁴ *Principles for Responsible Banking*, U.N. ENV'T PROGRAMME (last visited May 23, 2022), <https://www.unepfi.org/banking/bankingprinciples/>.

⁶⁵ Press Release, Federal Reserve Board announces that six of the nation's largest banks will participate in a pilot climate scenario analysis exercise designed to enhance the ability of supervisors and firms to measure and manage climate-related financial risks (Sept. 29, 2022), <https://www.federalreserve.gov/newsevents/pressreleases/other20220929a.htm>; BD. OF GOVERNORS OF THE FED. RES. SYS., PILOT CLIMATE SCENARIO ANALYSIS EXERCISE: PARTICIPANT INSTRUCTIONS (2023), <https://www.federalreserve.gov/publications/files/csa-instructions-20230117.pdf>.

have also begun conducting climate scenario analyses or stress tests over the past few years. These jurisdictions include the ECB,⁶⁶ the Bank of England,⁶⁷ the Bank of Canada, and the Hong Kong Monetary Authority,⁶⁸ among many others.⁶⁹ The Board should take notice of the scenarios used by these jurisdictions and their comparative advantages or disadvantages, as well as the sample scenarios prepared by NGFS (which the Board is leveraging for the transition risk module of the pilot exercise).⁷⁰ Here, we flag three best practices for the Board's consideration in finalizing supervisory guidance for individual banks and in carrying out broader scenario analysis exercises: the Board should consider defining scenarios that include an orderly and disorderly transition, as well as a hot-house scenario, setting at least a thirty-year analysis window, and accounting for the correlated nature of risks.

⁶⁶ Spyros Alogoskoufis et al., *ECB Economy-Wide Climate Stress Test*, EUROPEAN CENTRAL BANK (Working Paper No. 281, Sept. 2021), <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op281~05a7735b1c.en.pdf>; *2022 Climate Risk Stress Test*, EUROPEAN CENTRAL BANK (July 2022) https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.climate_stress_test_report.20220708~2e3cc0999f.en.pdf (analyzing the results of ECB's 2022 stress test and finding that climate risks are relevant for the large majority of significant institutions directly supervised by the ECB).

⁶⁷ GUIDANCE FOR PARTICIPANTS OF THE 2021 BIENNIAL EXPLORATORY SCENARIO: FINANCIAL RISKS FROM CLIMATE CHANGE, BANK OF ENGLAND (2021), <https://www.bankofengland.co.uk/-/media/boe/files/stress-testing/2021/the-2021-biennial-exploratory-scenario-on-the-financial-risks-from-climate-change.pdf>; *Results of the 2021 Climate Biennial Exploratory Scenarios (CBES)*, BANK OF ENGLAND (May 24, 2022) <https://www.bankofengland.co.uk/stress-testing/2022/results-of-the-2021-climate-biennial-exploratory-scenario> (finding that climate risks captured in the CBES scenarios are likely to create a drag on the profitability of UK banks and insurers).

⁶⁸ HONG KONG MONETARY AUTHORITY, PILOT BANKING SECTOR CLIMATE RISK STRESS TEST (2021), https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/Pilot_banking_sector_climate_risk_stress_test.pdf; *Assessing the Financial Impacts of Climate-Related Risks on Hong Kong-Listed Non-Financial Firms: A Forward-Looking Analysis Based on NGFS Scenarios*, HONG KONG MONETARY AUTHORITY (Mar. 11, 2022) <https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2022/RM01-2022.pdf> (finding that the credit risks arising from climate related risks should be relatively manageable for most of the firms in Hong Kong across different scenarios).

⁶⁹ See NETWORK FOR GREENING THE FIN. SYS., SCENARIOS IN ACTION: A PROGRESS REPORT ON GLOBAL SUPERVISORY AND CENTRAL BANK CLIMATE SCENARIO EXERCISES 6–7 (2021) <https://www.ngfs.net/sites/default/files/medias/documents/scenarios-in-action-a-progress-report-on-global-supervisory-and-central-bank-climate-scenario-exercises.pdf> (listing 29 planned, ongoing, or concluded climate scenario exercises that have been conducted by bank supervisors as of October 2021); *Climate Scenario Analysis by Jurisdiction: Initial Findings and Lessons*, FINANCIAL STABILITY BOARD (Nov. 15, 2022) <https://www.fsb.org/2022/11/climate-scenario-analysis-by-jurisdictions-initial-findings-and-lessons/> (finding that forward-looking assessment approaches are crucial to adequately account for the unprecedented nature of climate change).

⁷⁰ NETWORK FOR GREENING THE FIN. SYS., NGFS CLIMATE SCENARIOS FOR CENTRAL BANKS AND SUPERVISORS (2021), https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_scenario_analysis_final.pdf [hereinafter "NGFS Climate Scenarios"]; PILOT CLIMATE SCENARIO ANALYSIS EXERCISE: PARTICIPANT INSTRUCTIONS 21-33 (2023), <https://www.federalreserve.gov/publications/files/csa-instructions-20230117.pdf>.

- A. *The Board should consider defining orderly transition, disorderly transition, and hot-house scenarios in order to ensure that banks are exercising safe and sound practices with regards to each of these possible these outcomes.*

The Board should consider defining scenarios reflecting an orderly transition, disorderly transition, and hot-house world, in order to ensure that banks are meeting safety and soundness assessments under each of these possible future scenarios.

Much is still uncertain about the extent to which the world will rise to the challenge of climate change. The scientific community, through the Intergovernmental Panel on Climate Change, “has collectively chosen four Representative Concentration Pathways (RCPs),” reflecting a range of possible trajectories of greenhouse gas emissions and the resulting climate impacts, “to help [standardize] and improve comparability of climate change analysis.”⁷¹ Financial sector experts then analyze the economic implications of these different emissions pathways, taking into account the accompanying societal action.

The best-case scenario is an “orderly transition,” meaning stakeholders reduce emissions at a consistent rate, stemming warming around 1.5 to 2°C, as compared to pre-industrial levels.⁷² This approach would blunt the worst of physical risks, while imposing some transition costs. On the other hand, it is possible that no climate action—beyond current policies—is taken. In this case, warming peaks at a much higher level leading to a “hot-house” scenario.⁷³ Under a hot-house scenario, early transition costs are limited because the economy does not decarbonize; however, physical risks are much more severe than under an orderly transition.⁷⁴ A third possibility is between the two: a “disorderly transition.”⁷⁵ In this scenario, emissions continue at the level of current policy commitments for another decade or so, at which point severe physical harms spur action to limit warming to 1.5 to 2°C, leading to increased transition costs as the world strives to reduce emissions on a shortened timeline. This third scenario, therefore, carries both high initial physical costs and high and abrupt transition costs, though ultimately lower physical risks than the hot-house scenario.

Depending on which scenario occurs, the nature, timing, and scale of physical and transition costs vary. In order to understand whether banks will continue to meet safety and soundness requirements, it is necessary to understand how banks’ portfolios would be affected under these different possible pathways. Among other jurisdictions that have conducted scenario

⁷¹ NETWORK FOR GREENING THE FIN. SYS., GUIDE TO CLIMATE SCENARIO ANALYSIS FOR CENTRAL BANKS AND SUPERVISORS 12 (2020), https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_scenario_analysis_final.pdf [hereinafter “NGFS Guide to Climate Scenario Analysis”].

⁷² *Id.* at 18.

⁷³ *Id.* See also NGFS Climate Scenarios, *supra* note 70, at 9 (estimating warming between 2.5 and 3.0°C in a hot-house scenario).

⁷⁴ NGFS Guide to Climate Scenario Analysis, *supra* note 71, at 18.

⁷⁵ *Id.*

analysis, the three scenarios described above are a consistent fixture, with the primary variation being whether the orderly and disorderly transition cap warming at 1.5 or 2.0°C.⁷⁶

B. The Board should consider at least a thirty year time horizon and would likely benefit from also considering longer horizons.

In determining the time horizon of the scenario analysis, the Board should consider at least a thirty year time horizon and would likely benefit from considering longer time periods as well, capacity permitting. NGFS notes the tradeoffs in setting a time window for scenario analysis. While a shorter scenario window period reduces uncertainty in the estimate and may be more immediately actionable, a longer window gives more thorough insight into climate-related risks that are likely to affect the financial institution's balance sheet, long-term, particularly as assets can be long-lived.⁷⁷

Other jurisdictions have taken varying approaches, with some setting windows in 2050, 2080, and 2100, while others consider a timescale of five years or less.⁷⁸ If possible, sampling a short, medium, and long-term window would allow the Board to gain the most thorough understanding of a bank's risk. It may be particularly important to include a window that is at least thirty years in length, in order to account for the traditional thirty year mortgage cycle and other long-term loans. The mortgages that banks make today, for example, could be on their balance sheets until 2052, at which point the collateral will have faced highly escalated physical risks from climate change.

C. In executing scenario analyses, the Board should be mindful of correlated risks.

In executing scenario analyses, the Board should be mindful of the interplay among correlated risks. Sudden, large shocks to a bank's portfolio could be more damaging than risks accruing over time in a more manageable fashion. Regional banks, for example, could be at particular risk from geographically correlated risks, such as wildfires, hurricanes, or droughts; a single event could impact a large portion of a regional bank's real estate or agriculture loan portfolio. Although non-regional banks benefit from geographical diversity, they are not immune to correlated risks. Climate change may cause shifting environmental conditions and extreme weather events that affect large portions of the world at the same time.⁷⁹ Furthermore, transition risks are also correlated. Under a scenario that includes decarbonization due to policy

⁷⁶ Alogoskoufis et al., *supra* note 66, at 16–17; HONG KONG MONETARY AUTHORITY, *supra* note 68, at 2; BANK OF ENGLAND, *supra* note 67, at 56; *but see* BANK OF CANADA, USING SCENARIO ANALYSIS TO ASSESS CLIMATE TRANSITION RISK (2022), <https://www.bankofcanada.ca/wp-content/uploads/2021/11/BoC-OSFI-Using-Scenario-Analysis-to-Assess-Climate-Transition-Risk.pdf> (using four scenarios, “no additional action”, two pathways that limit warming to 2°C, and one pathway that reduces emissions in time to meet a 1.5°C total warming).

⁷⁷ NGFS Guide to Climate Scenario Analysis, *supra* note 71, at 14–15.

⁷⁸ *Id.*

⁷⁹ See Condon, *supra* note 51, at 82–83 (“Recent studies, for example, have highlighted the increasing, yet still largely unanticipated, chance for simultaneous temperature- and weather-induced crop failures in key breadbaskets around the world.”); Jitendra Singh et al., *Enhanced Risk of Concurrent Regional Droughts with Increased ENSO Variability and Warming*, 12 NATURE CLIMATE CHANGE 163 (2022), <https://www.nature.com/articles/s41558-021-01276-3.pdf>.

or technology changes, for example, there may be mass devaluation of oil and gas assets.⁸⁰ This could lead to large portions of a bank's portfolio losing value simultaneously. The Federal Reserve Bank of New York has published research investigating the risk to banks from various stranded asset scenarios that may be useful in informing the Board's thinking.⁸¹

V. The Board should consider how to mitigate potential harm to disadvantaged communities from banks' climate risk management strategies.

The Board recognized in its Draft Principles that banks' climate risk management strategies have the potential to raise fair lending concerns,⁸² which could cause further harm to communities that also face disproportionately high physical climate impacts.⁸³ Having recognized this risk, the Board should consider further steps to ensure that banks avoid such outcomes, including offering additional guidance, working with other agencies, and incorporating the input of affected communities. The Board should ensure that such steps both inform and are informed by its joint efforts with the FDIC and the OCC to update the Community Reinvestment Act regulations.⁸⁴

Due to historical and ongoing injustices, low-income communities and communities of color face heightened climate risks such as flooding, wildfires, and heat stress.⁸⁵ Some of these inequities can be traced back to redlining, a set of racist housing policies that pushed communities of color into less desirable areas, with disparities in environmental hazards that persist to this day.⁸⁶ Differential spending on infrastructure, such as sewer systems, and disaster assistance has reinforced this divide in risk.⁸⁷ Today, a home located in a historically

⁸⁰ See, e.g., Jean-Francois Mercure et al., *Macroeconomic Impact of Stranded Fossil Fuel Assets*, 8 NATURE CLIMATE CHANGE 588 (2018), <https://perma.cc/7YWU-9ZG3>.

⁸¹ Hyeyoon Jung et al., *Climate Stress Testing*, 977 FED. RES. BANK OF N.Y. STAFF RPTS. (Sept. 2021) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3931516.

⁸² Draft Principles, *supra* note 2, at 75,269-70.

⁸³ See Off. of the Comptroller of the Currency, Fed. Res. Sys. & Fed. Deposit Ins. Corp., *Community Reinvestment Act*, 87 Fed. Reg. 33,884 (June 3, 2022) [hereinafter "CRA Proposed Rule"].

⁸⁴ See generally CRA Proposed Rule, *supra* note 83; see also *Agencies Issue Joint Proposal to Strengthen and Modernize Community Reinvestment Act Regulations*, BD. OF GOVERNORS OF THE FED. RES. SYS. (May 5, 2022) <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20220505a.htm> (explaining that the Board, the FDIC, and the OCC issued a joint proposal to update the CRA by: (1) expanding access to credit, investment, and basic banking services in low and moderate income communities; (2) adapting to changes in the banking industry, including internet and mobile banking; (3) providing greater clarity, consistency and transparency; (4) tailoring CRA evaluations and data collection to bank size and type; and (5) maintaining a unified approach).

⁸⁵ See ANNA CASH ET AL., *CLIMATE CHANGE DISPLACEMENT IN THE U.S. – A REVIEW OF THE LITERATURE* (2020), <https://perma.cc/S923-2YNL>; Brad Plumer, Nadja Popovich & Brian Palmer, *How Decades of Racist Housing Policy Left Neighborhoods Sweltering*, N.Y. TIMES (Aug. 24, 2020), <https://perma.cc/CZ4B-6QAS> (explaining how formerly redlined neighborhoods are more likely to suffer from heightened heat stress today); Jesse Keenan et al., *Climate Gentrification: From Theory to Empiricism in Miami-Dade County, Florida*, 13 ENV'T RES. LETTERS 054001 (Apr. 2018).

⁸⁶ Kriston Capps & Christopher Cannon, *Redlined, Now Flooding*, BLOOMBERG CITYLAB (Mar. 15, 2021), <https://www.bloomberg.com/graphics/2021-flood-risk-redlining/>; Plumer, Popovich & Palmer, *supra* note 85.

⁸⁷ See Capps & Cannon, *supra* note 86; Env't Def. Fund, *Comments on Request for Information on FEMA Programs, Regulations, and Policies 1* (Jul. 21, 2021), <https://www.edf.org/sites/default/files/documents/EDF%20FEMA%20RFI%20Climate%20Chance%20and%20Unde>

redlined neighborhood is 20% more likely to suffer high flood risk than a home in a greenlined neighborhood.⁸⁸ Historically redlined neighborhoods also face higher heat stress.⁸⁹

As a result, if banks decided to reduce lending in areas exposed to higher physical climate risks as a risk management strategy, low-income communities and communities of color could be disproportionately affected.⁹⁰ The Board recognizes this concern in its Draft Principles, advising banks to consider “possible fair lending concerns if the financial institution’s risk mitigation measures disproportionately affect communities or households on a prohibited basis such as race or ethnicity.”⁹¹ The Board also notes that banks should “consider climate-related financial risk impacts on . . . low-to-moderate income and other disadvantaged households and communities,” including “assessing physical harm or access to the financial institution’s products and services.”⁹²

The Board should contemplate whether and how it could supplement the Draft Principles to mitigate the risk of inequitably reduced credit access and also how it might work with other agencies to address these challenges more comprehensively, informed by the input of affected communities. For example, in subsequent guidance, the Board could consider more specifically outlining intersections between climate risk and banks’ obligations under the Fair Housing Act, Equal Credit Opportunity Act, and Community Reinvestment Act.⁹³ This could include offering recommendations for banks on strategies for reducing climate risk exposure that would preserve lending in low-income communities and communities of color, such as advising banks on how to weigh resilience measures in risk assessments.

With other agencies, the Board could consider supporting the formation of a coordinating structure, such as an interagency working group, focused on the issue of continued credit and insurance access in low-income areas at heightened risk from climate change.⁹⁴ In addition to

[rserved%20Populations%207.21.21%20%28002%29.pdf](#) (“FEMA . . . provid[es] a critical safety net of support and resources when communities face catastrophic disaster damages. However, long-standing policies and programs have actively exacerbated the natural hazard and socioeconomic vulnerability of underserved communities, as noted in recent analyses of unequal outcomes of post-disaster FEMA assistance along racial lines.”).

⁸⁸ *Id.*

⁸⁹ See, e.g., Plumer, Popovich & Palmer, *supra* note 85.

⁹⁰ Draft Principles, *supra* note 2, at 25,270-71.

⁹¹ *Id.* at 25,270.

⁹² Draft Principles, *supra* note 2, at 75,269.

⁹³ *Fair Lending Supervision and the Community Reinvestment Act*, BD. OF GOVERNORS OF THE FED. RES. SYS. (Jul. 13, 2021) <https://www.federalreserve.gov/economic-disparities-fair-lending-supervision-community-reinvestment-act.htm>; Annual Report: Consumer and Community Affairs, BOARD OF THE FEDERAL RESERVE SYSTEM (Aug. 11, 2022) <https://www.federalreserve.gov/publications/2021-ar-consumer-and-community-affairs.htm>.

⁹⁴ The White House Climate Policy Office has formed similar interagency working groups, including one on flood resilience, in response to Executive Order 14,030 on Climate-Related Financial Risk. See Press Release, Readout of the White House Flood Resilience Interagency Working Group Meeting of Implementation of the Federal Flood Risk Management Standard (Aug. 27, 2021), <https://www.whitehouse.gov/ceq/news-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-implementation-of-the-federal-flood-risk-management-standard/>. Credit access protection would also align with the goals of Executive Order 14,030, which include “accounting for and addressing disparate impacts on

the FDIC and the OCC, a non-exhaustive list of potential agency members could include the Federal Emergency Management Agency, which coordinates disaster relief funding and is working to update its practices to advance equity and bolster climate resilience;⁹⁵ the Federal Insurance Office, which is researching climate change-driven insurance coverage gaps;⁹⁶ the Department of Housing and Urban Development, which is working on issues of climate risk and equity in mortgage lending;⁹⁷ the Treasury Department’s Community Development Finance Institutions Fund and Commerce Department’s Economic Development Administration, which facilitate access to funding for low-income communities;⁹⁸ and other financial regulatory entities. Additionally, the expertise and priorities of affected communities should inform the creation and operation of any such interagency group.

We thank the Board for its attention to climate-related financial risk and its consideration of these comments.

Respectfully submitted,

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disadvantaged communities and communities of color.” See Exec. Order 14,030 §1, 86 Fed. Reg. 27,967, 27,967 (May 25, 2021).

⁹⁵ Fed. Emergency Mgmt. Agency, Request for Information on FEMA Programs, Regulations, and Policies, 86 Fed. Reg. 21,325 (Apr. 22, 2021); see generally Env’t Def. Fund, Comments on Request for Information on FEMA Programs, Regulations, and Policies (July 21, 2021), <https://www.edf.org/sites/default/files/documents/EDF%20FEMA%20RFI%20Climate%20Chance%20and%20Underserved%20Populations%207.21.21%20%28002%29.pdf>.

⁹⁶ See Fed. Ins. Off., Request for Information on the Insurance Sector and Climate-Related Financial Risks, 86 Fed. Reg. 48,814 (Aug. 31, 2021) (requesting information on how gaps in insurance may be exacerbated by climate change); see also Dep’t of the Treasury, Agency Information Collection Activities; Proposed Collection; Comment Request; Federal Insurance Office Climate-Related Financial Risk Data Collection, 87 Fed. Reg. 64,134 (Oct. 21, 2022) (proposing data collection on underwriting of homeowners’ insurance to assess climate-related risks). Policy Integrity and EDF filed comments on these proposals. See Inst. for Pol’y Integrity et al., Comments on Request for Information on the Insurance Sector and Climate-Related Financial Risk, (Nov. 15, 2021), https://policyintegrity.org/documents/FIO_RFI_-_Comments.pdf; EDF, FIO Climate-Related Financial Risk Data Collection Comments (Dec. 20, 2022), <https://www.icrri.org/files/2022/12/EDF-FIO-Climate-Related-Financial-Risk-Data-Collection-Comments-12.20.22-1.pdf>.

⁹⁷ U.S. CLIMATE-RELATED FINANCIAL RISK EXECUTIVE ORDER 14030, A ROADMAP TO BUILD A CLIMATE-RESILIENT ECONOMY 28–29 (2021), <https://www.whitehouse.gov/wp-content/uploads/2021/10/Climate-Finance-Report.pdf>.

⁹⁸ See *About Us*, CMTY. DEV. FIN. INSTS. FUND, U.S. DEP’T OF THE TREASURY, <https://www.cdfifund.gov/about> (last visited Feb. 9, 2022); *Overview*, U.S. ECON. DEV. ADMIN., U.S. DEP’T OF COMMERCE, <https://eda.gov/about/> (last visited Feb. 9, 2022).