



June 26, 2023

Via Federal eRulemaking Portal

Melane Conyers-Ausbrooks, Secretary of the Board National Credit Union Administration 1775 Duke Street Alexandria, VA 22314-3428

Re: Climate-Related Financial Risk (Docket No. NCUA-2023-0045) (RIN 3133-AF52)

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 National Credit Union Administration ("NCUA") in response to its request for information ("RFI") on current and future climate and natural disaster risks to federally insured credit unions, related entities, their members, and the National Credit Union Share Insurance Fund.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 NCUA's intention to promote safety and soundness by developing guidance, reporting requirements, and other regulatory actions as appropriate to bolster credit unions' management of climate-related financial risks. We recommend that the NCUA move expeditiously and in coordination with other regulators working to address climate-related financial risk. We offer the following recommendations on that process:

- I. The NCUA should consider offering detailed guidance regarding the physical and transition risks that affect the management of various risk areas. (RFI Questions 1, 2, 4, 5, 20)
- II. The NCUA should consider guiding credit unions on the use of relevant, accurate, and timely climate-related data for risk management and reporting. (RFI Questions 2, 19, 25)

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

² NCUA, Climate-Related Financial Risk, 85 Fed. Reg. 25,028 (Apr. 25, 2023) [hereinafter "RFI"].

- III. The NCUA should consider requiring credit unions to incorporate climate risk into regulatory reports and can leverage other entities' work on climate-related disclosures. (RFI Questions 19, 28, 35, 36, 37)
- IV. The NCUA should consider utilizing information from larger banks' climate scenario analyses, adapting any lessons in guidance for smaller institutions. (RFI Questions 25, 34, 37)
- V. The NCUA should consider how to mitigate potential harm to disadvantaged communities from credit unions' climate risk management strategies. (RFI Questions 3, 6, 22)
 - I. The NCUA should consider offering detailed guidance regarding the physical and transition risks that affect the management of various risk areas. (RFI Questions 1, 2, 4, 5, 20)

Examples of ways that climate change could affect credit unions may help them identify, assess, and manage climate-related financial risks more comprehensively, particularly if the credit unions are just beginning to learn about climate risk. In offering guidance on physical and transition risks, the NCUA should consider clearly highlighting climate-related market risk, the interconnectedness of physical and transition risks, and 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.³ Physical risks include the damages wrought by wildfires, flooding, extreme heat, and other direct results of climate change.⁴ Transition risks are the costs associated with societal shifts in response to climate change, such as those from technological and policy changes, changing consumer sentiment, and liability for climate damages.⁵ Typical credit union portfolios exhibit both physical and transition risks.

The NCUA should consider providing guidance on how climate change intersects with each key risk management area, including credit risk, liquidity risk, other financial risk (including price and interest rate risks), operational risk, legal/compliance risk, and other non-financial risk. Guidance explicitly outlining the types of climate-related risks relevant to each risk management area would set clear expectations for the scope of credit unions' risk assessments and make it more likely that credit unions acquire the tools necessary to assess the climate risks in their portfolios. While climate risks are similar to other types of financial risks, it is also the

³ 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://nyujlpp.org/wp-content/uploads/2022/05/Condon-et-al-Mandating-Disclosure-of-Climate-Related-Financial-Risk-PROOF.

⁴ *Id.* at 749–55.

⁵ *Id.* at 755–59.

⁶ 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.

case that "the nature of climate risks is less familiar to financial institutions." Financial institutions are still building the expertise needed to identify potential climate risks; providing tailored guidance will ensure that credit unions are on the right track.

A. The NCUA should clarify how climate-related credit risk implicates both an obligor's ability to pay a loan and the value of the underlying collateral.

The NCUA should consider providing examples of the types of credit risk that credit unions should review in risk assessments. In particular, the NCUA could demonstrate ways climate change could either reduce an obligor's ability to pay or cause damage to the underlying collateral, increasing a credit union's losses in the case of default.

The NCUA's Examiner's Guide defines credit risk as "the possibility that a borrower or counterparty will fail to meet terms of any contract with the credit union or otherwise fail to perform as agreed, impacting the credit union's earnings or net worth." The magnitude of this risk depends on both the likelihood that the obligor will pay their debt and the value the credit union can recover if the obligor fails to do so. In other words, credit risk responds 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. ⁹ Credit unions 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

⁷ 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"]. 8 Examiner's Guide, NCUA,

https://publishedguides.ncua.gov/examiner/Content/ExaminersGuide/Examination&SupervisionContacts/Risk-Focused Exam/Risk%20Categories.htm#Credit.

⁹ 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.

example, insurers are no longer willing to cover the risk of wildfires or if consumers have concerns about living in wildfire-prone areas.¹⁰

In assessing a credit union's safety and soundness, the NCUA already considers a credit union's underwriting practices with regards to the sufficiency of collateral and creditworthiness of obligors. ¹¹ The climate's impact on credit risk is an aspect of these traditional concerns. By providing illustrative examples of credit risks, the NCUA can ensure these risks receive sufficient due diligence.

B. The NCUA should consider providing examples of the types of climate-related liquidity risks a credit union may face.

The NCUA should consider clearly laying out examples of climate-related liquidity risks and also describing how liquidity risks may exacerbate—or be exacerbated by—operational and market risk. ¹² 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 financial institutions invested in these assets. ¹³

C. The NCUA should consider providing examples of market risk and suggesting acceptable measurement methods for such risk.

The NCUA should consider clearly laying out examples of market risk and suggesting an array of acceptable measurement methodologies to estimate these risks.

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. ¹⁴ Transition risks can also affect investment value. For example, policy or technology changes that align the U.S. energy system

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¹⁰ 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.

¹¹ See Examiner's Guide, NCUA, https://ncua.gov/regulation-supervision/letters-credit-unions-other-guidance/items-consider-when-underwriting-member.

¹² 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").

¹³ 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.").

¹⁴ See FSOC Climate Report, supra note 7, at 108–12.

with a carbon-zero future could lead to declines in the oil market;¹⁵ 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.¹⁶ The NCUA could provide examples of risks like these.

The Securities and Exchange Commission's ("SEC") proposed regulations on climate-related disclosures, when finalized, should assist credit unions in considering climate impacts as they make certain types of investments.¹⁷ Other jurisdictions and standard-setting bodies have likewise made progress on initiatives to increase the consistency, comparability, and reliability of climate-related disclosures.¹⁸ In turn, this should make it easier for credit unions to conduct thorough assessments of market risk. However, some assets are not subject to these regulations. Municipal bonds, for example, are not subject to SEC reporting requirements,¹⁹ though the Municipal Securities Regulation Board ("MSRB") is working to determine how best to uncover greenwashing practices in the municipal bond market.²⁰

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. 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. According to a June 2022 analysis, nine FSOC member agencies had taken over 230 public actions to address climate-related

¹⁵ *Id.* at 110–12.

¹⁶ 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").

¹⁷ See generally Sec. & Exch. Comm'n, The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21,334 (Apr. 11, 2022).

¹⁸ 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).

¹⁹ FSOC Climate Report, *supra* note 7, 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-FWFQ.

²⁰ 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.

²¹ See generally FSOC Climate Report, supra note 7.

²² 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.

financial risk, including progress by the SEC, MSRB, Commodity Futures Trading Commission, Federal Housing Finance Agency, and Treasury Department on improving climate-related disclosures.²³ The NCUA should remain abreast of its fellow agencies' work in this area.

These market considerations are within the ambit of risks that credit unions should already be considering. Examiners already assess how effectively credit unions are managing the market risk categories of credit risk, interest rate risk, and liquidity risk.²⁴ The climate crisis will likely affect these financial components in a tangible way and these climate risks must be contemplated. Offering detailed examples in any guidance the NCUA provides could help ensure that credit unions properly consider these risks and incorporate them into their core risk management frameworks.

D. The NCUA should consider providing a detailed description of third-party operational risk.

Climate change could exacerbate operational risks. Providing concrete examples that demonstrate the range of risks could be helpful, particularly regarding third-party risk. Even if a credit union'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 transfers to the business operations. For example, in October 2012 Hurricane Sandy caused a number of credit unions in New York to close due to both physical damage to buildings and electrical outages, ²⁵ and in February 2021 a severe winter storm in Texas caused a number of credit unions to close due to widespread power outages. ²⁶ In our interdependent world, it is not sufficient to consider only the risk associated with a particular parcel of land; credit unions must also consider how third-party risk enters the system. Making an explicit connection to third party operations as a source of risk will encourage credit unions to create more robust plans.

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

The NCUA should consider describing the interconnectedness between legal risk and other types of risk. For example, changes in insurance requirements could pose a credit risk,

²³ See 2022 Climate Risk Scorecard, CERES, https://ceres.org/accelerator/regulation/scorecard (last visited June 13, 2023).

²⁴ See Risk Categories, NCUA EXAMINER'S GUIDE (Oct. 11, 2016), https://publishedguides.ncua.gov/examiner/Content/ExaminersGuide/Examination&SupervisionContacts/Risk-Focused Exam/Risk%20Categories.htm.

²⁵ See David Morrison, Hurricane Sandy: NYC Credit Unions Reeling But Keeping Their Feet, CREDIT UNION TIMES (Oct. 31, 2012), https://www.cutimes.com/2012/10/31/hurricane-sandy-nyc-credit-unions-reeling-but-keep/.

²⁶ See Anastasia E. Lennon, Texas power outages cause banking problems in New Bedford, STANDARD-TIMES (Feb. 17,

^{2021), &}lt;a href="https://www.southcoasttoday.com/story/news/local/2021/02/17/texas-power-outage-causes-issues-new-bedford-bank-customers/6785795002/">https://www.southcoasttoday.com/story/news/local/2021/02/17/texas-power-outage-causes-issues-new-bedford-bank-customers/6785795002/.

particularly given that property and casualty insurance terms are often only a few years long, which is shorter than many loan terms.²⁷

F. The NCUA should consider describing private governance initiatives as a sub-category when providing guidance on other non-financial risk.

Credit unions should consider other non-financial risks, such as reputational damage, liability, and litigation. In addition to these risks, the NCUA should also consider explicitly noting the potential for private governance initiatives, ²⁸ including member pressure. Member credit unions of the Net-Zero Banking Alliance have committed to align their assets and liabilities with a pathway to a net-zero carbon emission earth by 2050. ²⁹ It is possible that credit unions that have not made such commitments will face member pressure to do so and, on the other hand, that credit unions that have committed will be held to those commitments by members. In either case, credit unions should be aware of their position within the net-zero commitment landscape.

The NCUA should consider guiding credit unions on the use of relevant, accurate, and timely climate-related data for risk management and reporting. (RFI Questions 2, 19, 25)

The NCUA should consider guiding credit unions on best practices regarding sources and analytical methods for climate risk data.

Credit unions should use data both from counterparties and from public sources to develop a comprehensive picture of their climate-related risk exposure. With transactional counterparties, credit unions 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.³⁰ In order to ensure quality and consistency, the NCUA could also guide credit unions on reliable sources and proper uses of various types of publicly available data, such as climate-

²⁸ See Michael P. Vandenbergh, *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).

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).

²⁷ 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.

²⁹ See Garrett Jones et al., How Credit Unions Can Help Build A Green Economy, CREDIT UNION MGMT. (Apr. 17, 2023), https://www.cumanagement.com/blogs/2023/04/17/how-credit-unions-can-help-build-green-economy ("Many credit unions and financial institutions worldwide have joined the Net Zero Banking Alliance, an industry-led, UN-convened initiative that brings together banks that are committed to aligning their lending and investment portfolios with net-zero emissions by 2050."); Net-Zero Banking Alliance, U.N. ENV'T PROGRAMME, https://www.unepfi.org/net-zero-banking/commitment/ (last visited June 13, 2023); Members: Net-Zero Banking Alliance, U.N. ENV'T PROGRAMME, https://www.unepfi.org/net-zero-banking/members/ (last visited June 13, 2023).

30 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),

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 NCUA should also consider ways to coordinate with other regulators working to address climate risks, as well as other experts and stakeholders. The NCUA's membership in FSOC, which has commenced work on climate risk issues including data,³¹ 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. Additionally, the NCUA 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 NCUA should consider requiring credit unions to incorporate climate risk into regulatory reports and can leverage other entities' work on climate-related disclosures. (RFI Questions 19, 28, 35, 36, 37)

The NCUA should consider requiring credit unions 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, members, the market, and the general public. In designing these requirements, the NCUA 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 NCUA should consider how these reports can be updated to reflect climate-related financial risks to credit unions. As the NCUA states, regulators use call reports "to determine if any changes in supervision are warranted [and] . . . to identify emerging industry trends." The NCUA and FFIEC provide instructions on preparation of call reports. 33 Updating these instructions with details on where and how to incorporate climate risk into a call report will benefit both the

³¹ FSOC Climate Report, *supra* note 7, at 47–66.

³² Call Report, NCUA EXAMINER'S GUIDE (Oct. 21, 2020),

https://publishedguides.ncua.gov/examiner/Content/ExaminersGuide/RegulatoryCompliance/CallReport/Call%20 Report%20Overview.htm.

³³ See id.; Bank Call Report Information, FED. DEPOSIT INS. CORP., https://www.fdic.gov/resources/bankers/call-reports/index.html (last visited June 13, 2023) (providing current FFIEC forms and instructions).

reporting entities and the users of reported information.³⁴ Standardizing disclosures helps to ensure that they are comparable, specific, and decision-useful.³⁵

Disclosing climate risk information publicly in a clear, standardized manner, such as through call reports, ³⁶ benefits multiple stakeholders. ³⁷ As explained by FSOC, "[r]egulatory reports assist the federal banking agencies in fulfilling their supervisory mandates, and assist the public, state banking authorities, researchers, and bank rating agencies in understanding the condition of the banking sector." ³⁸ Mandating disclosures would benefit credit unions 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. ³⁹ Access to improved climate risk information benefits market participants, who can better align their decisions with their objectives, which in turn helps the market avoid the destabilizing effects of a burst "climate bubble." ⁴⁰ Given the role climate-related disclosures can play in preventing economic crises and internalizing externalities, the greater public also benefits. ⁴¹

Many other entities, including other regulators, NGOs, and IGOs, have already developed climate-related disclosures that the NCUA can leverage to the extent that they are relevant in this context. The NCUA should continue to engage as a member of and draw from the climate risk disclosure resources developed by FSOC, and it can also draw on resources from the Network for Greening the Financial System ("NGFS")⁴² and Basel Committee on Banking Supervision ("BCBS").⁴³ The BCBS climate risk principles include guidelines specifically for examiners as well as for banks, an approach that the NCUA should consider for its guidance.⁴⁴

³⁴ See OCC, 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.").

³⁵ See Condon et al., supra note 3, at 757.

³⁶ See Bank Financial Reports, FED. DEPOSIT INS. CORP., https://www.fdic.gov/resources/bankers/bank-financial-reports/index.html (last visited June 13, 2023) ("Call Report data are also used by the public, state banking authorities, researchers, bank rating agencies, and the academic community.").

³⁷ See Condon et al., supra note 3, at 772-77 ("Improved Disclosure Regulations Will Benefit Corporations, Investors, Markets, and Society").

³⁸ FSOC Climate Report, *supra* note 7, at 73.

³⁹ See Condon et al., supra note 3, at 773-74.

⁴⁰ 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).

⁴¹ See Condon et al., supra note 3, at 793-94.

⁴² See NGFS Publications, NETWORK FOR GREENING THE FIN. Sys., https://www.ngfs.net/en/liste-chronologique/ngfs-publications (last visited June 13, 2023).

⁴³ 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.

⁴⁴ See id.

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 NCUA can analyze the voluminous materials on climate disclosures that various experts submitted in response to the SEC's March 2021 request for public input⁴⁵ and its March 2022 proposed rule.⁴⁶ 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 Disclosures⁴⁷ ("TCFD") and the industry-specific Sustainability Accounting Standards Board standards (including for financial institutions),⁴⁸ which could likewise be useful resources for the NCUA. The International Sustainability Standards Board ("ISSB") has proposed requirements for climate-related disclosure that likewise build upon the recommendations of the TCFD, and include requirements for the disclosure of material information about a company's significant sustainability-related risks.⁴⁹

Banking regulators in other jurisdictions both internationally, like the European Central Bank ("ECB"),⁵⁰ and sub-nationally in the United States, like the New York Department of Financial Services,⁵¹ have also taken substantial steps on disclosure of climate risk by regulated entities. The NCUA 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

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⁴⁵ See Comments on Climate Change Disclosures, SEC. & EXCH. COMM'N, https://www.sec.gov/comments/climate-disclosure/cll12.htm (last visited June 13, 2023).

⁴⁶ See Comments for The Enhancement and Standardization of Climate-Related Disclosures for Investors, SEC. & EXCH. COMM'N, https://www.sec.gov/comments/s7-10-22/s71022.htm (last visited June 13, 2023).

⁴⁷ TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, https://www.fsb-tcfd.org/ (last visited June 13, 2023).

⁴⁸ Examples of SASB's Industry-Specific Approach, VALUE REPORTING FOUNDATION, SASB STANDARDS, https://www.sasb.org/industry-specific/ (last visited June 13, 2023).

⁴⁹ *Climate-related Disclosures*, IFRS, https://www.ifrs.org/projects/work-plan/climate-related-disclosures/ (last visited June 13, 2023).

⁵⁰ 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).

⁵¹ See Climate Change, N.Y. STATE DEP'T OF FIN. SERVS., https://www.dfs.ny.gov/industry_guidance/climate_change (last visited June 13, 2023).

Financial Risk Forum⁵² and the UN Environment Programme Finance Initiative⁵³ have produced multiple reports and guides reflecting the industry's views on best climate risk practices.

IV. The NCUA should consider utilizing information from larger banks' climate scenario analyses, adapting any lessons in guidance for smaller institutions. (RFI Questions 25, 34, 37)

A number of banking regulators have begun conducting climate scenario analyses or stress tests over the past few years. These include the U.S. Federal Reserve,⁵⁴ the ECB,⁵⁵ the Bank of England,⁵⁶ the Bank of Canada, and the Hong Kong Monetary Authority,⁵⁷ among many others.⁵⁸ The NCUA 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,⁵⁹

⁵² Climate Financial Risk Forum, BANK OF ENGLAND, https://www.bankofengland.co.uk/climate-change/climate-financial-risk-forum (last visited June 13, 2023).

⁵³ Principles for Responsible Banking, U.N. ENV'T PROGRAMME, https://www.unepfi.org/banking/bankingprinciples/ (last visited June 13, 2023).

⁵⁴ 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.

⁵⁵ 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).

⁵⁶ 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 (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).

⁵⁷ 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-

<u>research/research-memorandums/2022/RM01-2022.pdf</u> (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).

⁵⁸ 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).

⁵⁹ 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.

and utilize any applicable information to inform guidance for credit unions.⁶⁰ For example, studies from larger banks could provide valuable information on climate-related capital risk weights by identifying some assets as being riskier than others.⁶¹ Smaller banks can use this information to impose additional risk weights on identified assets, including assets made riskier by physical and transition risks. Because regional and community banks "tend to have greater geographic and sectoral concentration[s] of their loan portfolios,"⁶² identifying any corresponding concentrations of risk will be especially important. When the NCUA looks for helpful scenario analyses, it should consider whether such studies use three best practices: (1) defining scenarios that include an orderly and disorderly transition, as well as a hot-house scenario; (2) setting at least a thirty-year analysis window; and (3) accounting for the correlated nature of risks.

A. The NCUA should consider using scenario analyses that define orderly transition, disorderly transition, and hot-house scenarios in order to ensure that credit unions have enough information to exercise safe and sound practices with regard to each of these possible outcomes.

The NCUA should consider using scenarios reflecting an orderly transition, disorderly transition, and hot-house world, in order to ensure that credit unions can meet safety and soundness requirements 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." 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.⁶⁴ 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

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⁶⁰ Lilith Fellowes-Granda and Crystal Weise, *How U.S. Regulators Can Help Community and Regional Banks Address Climate-Related Financial Risks,* CENTER FOR AMERICAN PROGRESS (April 28, 2023),

https://www.americanprogress.org/article/how-u-s-regulators-can-help-community-and-regional-banks-address-climate-related-financial-risks/.

⁶¹ *Id*.

⁶² Id.

⁶³ 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"].

⁶⁴ *Id.* at 18.

case, warming peaks at a much higher level leading to a "hot-house" scenario. ⁶⁵ 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. ⁶⁶ A third possibility is between the two: a "disorderly transition." 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 credit unions will continue to meet safety and soundness requirements, it is necessary to understand how credit unions' portfolios would be affected under these different possible pathways. Among other jurisdictions that have conducted scenario 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.⁶⁸

B. The NCUA should consider using scenario analyses with at least a thirty-year time horizon and would likely benefit from also considering studies with longer horizons.

In determining which scenario analyses will be most helpful to consider, the NCUA should look for studies with at least a thirty-year time horizon and would likely benefit from considering studies with longer time periods as well. 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.⁶⁹

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. ⁷⁰ If possible, considering studies with a short, medium, and long-term window would allow the NCUA to gain the most thorough understanding of a credit union'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

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⁶⁵ *Id. See also* NGFS Climate Scenarios, *supra* note 59, at 9 (estimating warming between 2.5 and 3.0°C in a hothouse scenario).

⁶⁶ NGFS Guide to Climate Scenario Analysis, *supra* note 63, at 18.

⁶⁷ Id.

⁶⁸ Alogoskoufis et al., *supra* note 55, at 16–17; HONG KONG MONETARY AUTHORITY, *supra* note 57, at 2; BANK OF ENGLAND, *supra* note 56, 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).

⁶⁹ NGFS Guide to Climate Scenario Analysis, *supra* note 63, at 14–15.

⁷⁰ Id.

mortgage cycle and other long-term loans. The mortgages that credit unions make today, for example, could be on their balance sheets until 2053, at which point the collateral will have faced highly escalated physical risks from climate change.

C. In considering scenario analyses, the NCUA should be mindful of correlated risks.

In considering scenario analyses, the NCUA should be mindful of the interplay among correlated risks. Sudden, large shocks to a credit union's portfolio could be more damaging than risks accruing over time in a more manageable fashion. Regional credit unions, 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 real estate or agriculture loan portfolio. Although non-regional credit unions 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. Furthermore, transition risks are also correlated. Under a scenario that includes decarbonization due to policy or technology changes, for example, there may be mass devaluation of oil and gas assets. This could lead to large portions of a credit union'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 NCUA's thinking.

V. The NCUA should consider how to mitigate potential harm to disadvantaged communities from credit unions' climate risk management strategies. (RFI Questions 3, 6, 22)

Due to historical and ongoing injustices, low-income communities and communities of color face heightened climate risks such as flooding, wildfires, and heat stress.⁷⁴ 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.⁷⁵ Differential spending on infrastructure, such as sewer systems, and

⁷¹ See Condon, supra note 40, 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.

⁷² 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.

⁷³ Hyeyoon Jung et al., *Climate Stress Testing*, 977 Feb. Res. Bank of N.Y. Staff Rpts. (Sept. 2021) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3931516.

⁷⁴ See Anna Cash et al., Climate Change Displacement in the U.S. – A Review of the Literature (2020), https://perma.cc/5923-2YNL; 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-Date County, Florida, 13 Env't Res. Letters 054001 (Apr. 2018).

The Striston 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 74.

disaster assistance has reinforced this divide in risk.⁷⁶ Today, a home located in a historically redlined neighborhood is 20% more likely to suffer high flood risk than a home in a greenlined neighborhood.⁷⁷ Historically redlined neighborhoods also face higher heat stress.⁷⁸

As a result, if credit unions 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. The NCUA recognizes this concern in its RFI, urging credit unions to consider what "steps [they] could take to mitigate physical risks to ensure continued lending to these populations." The NCUA also advises credit unions to consider that "[f]inancially vulnerable households and communities are the least able to absorb the costs associated with climate-related disasters, so these consumers may have more difficulty adapting to changes in government policies and the natural environment," meaning that "climate-related financial risks may be amplified for [credit unions] serving these communities."

The NCUA should contemplate how 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 NCUA could consider more specifically outlining intersections between climate risk and credit unions' obligations under the Fair Housing Act and Equal Credit Opportunity Act.⁸¹ This could include offering recommendations for credit unions on strategies for reducing climate risk exposure that would preserve lending in low-income communities and communities of color, such as advising credit unions on how to weigh resilience measures in risk assessments.

With other agencies, the NCUA 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.⁸² In addition to

 $\underline{implementation\text{-}of\text{-}the\text{-}federal\text{-}flood\text{-}risk\text{-}management\text{-}standard\text{/}}.$

⁷⁶ See Capps & Cannon, supra note 75; 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 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.").

77 Id.

⁷⁸ See, e.g., Plumer, Popovich & Palmer, supra note 74.

⁷⁹ RFI, *supra* note 2, at 25,030.

⁸⁰ *Id.* at 25,029.

⁸¹ NCUA, OFFICE OF CONSUMER FINANCIAL PROTECTION, FAIR LENDING GUIDE (2017) https://ncua.gov/files/publications/regulations/fair-lending-guide.pdf.

⁸² 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), <a href="https://www.whitehouse.gov/ceq/news-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-on-updates/2021/08/27/readout-of-the-first-white-house-flood-resilience-interagency-working-group-meeting-of-the-first-white-house-flood-resil

the Federal Reserve, FDIC, and 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;⁸³ the Federal Insurance Office, which is researching climate change-driven insurance coverage gaps;⁸⁴ the Department of Housing and Urban Development, which is working on issues of climate risk and equity in mortgage lending;⁸⁵ 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;⁸⁶ 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 NCUA for its attention to climate-related financial risk and its consideration of these comments.

Respectfully submitted,

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⁸³ 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),

 $[\]frac{https://www.edf.org/sites/default/files/documents/EDF\%20FEMA\%20RFI\%20Climate\%20Chance\%20and\%20Underserved\%20Populations\%207.21.21\%20\%28002\%29.pdf.$

⁸⁴ 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),

⁸⁵ 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.

⁸⁶ See About Us, CDFI FUND, U.S. DEP'T OF THE TREASURY, https://www.cdfifund.gov/about (last visited June 13, 2023); About Overview, U.S. EDA, U.S. DEP'T OF COMMERCE, https://eda.gov/about/ (last visited June 13, 2023).