Americans for Financial Reform Education Fund

June 26, 2023

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

Re: NCUA Climate-related Financial Risk Request for Information and Comment
88 FR 25028; Docket ID: NCUA-2023-0045; RIN: 3133-AF52

Dear Secretary Conyers-Ausbrooks, Chairman Harper, Vice Chairman Hauptman, Board Member Hood, and NCUA staff,

Americans for Financial Reform Education Fund (AFREF) appreciates the opportunity to comment in response to the request for information (RFI) from the National Credit Union Administration (NCUA) on current and future climate-related financial risk to federally insured credit unions (FICUs or "credit unions"), related entities, their members, and the National Credit Union Share Insurance Fund (SIF). This letter is also endorsed by The Greenlining Institute and Public Citizen.

Climate risk is financial risk and AFREF commends the NCUA for releasing this important RFI, and recognizing that "the physical effects of climate change along with associated transition costs pose significant risks to the U.S. economy and the U.S. financial system," and that "weaknesses in how a credit union identifies, measures, monitors, and mitigates physical and transition risks could adversely affect a credit union's safety and soundness."[1]

First and foremost, the NCUA has the responsibility as a supervisory agency and SIF administrator to consider threats to the safety and soundness of credit unions–and to financial stability–arising from insufficiently managed risks. The banking crisis of 2023 reminds us that financial stability implications can stem from lenders of all sizes, not just the largest banks. Climate change is a recognized threat that requires immediate attention from regulators and financial institutions, ranging from the largest banks to the smallest community lenders. In

[1] National Credit Union Administration (NCUA). "Climate-Related Financial Risk - Request for Information" *Federal Register*, June 15, 2023. https://www.federalregister.gov/d/2023-08715

addressing climate risk to credit unions, the NCUA should recognize that credits unions have expertise and local knowledge of the needs and risks within their own communities, and act in partnership as a central hub of information, resources, and tools to support risk management and promote climate opportunities for FICUs and their members across the country.

The New York State Department of Financial Services 2022 proposed climate guidance accurately conveys the challenge that climate risk poses to small financial institutions, including credit unions:

> *"Smaller organizations are not necessarily less exposed to climate-related financial risk, because they may have concentrated business lines or geographies that are highly exposed to climate-related financial risks without the risk-mitigating benefit of diversification available to larger organizations. Further, Regulated Organizations do not all have the same level of resources to manage these risks and may be at different points in the process of incorporating these risks into their governance, strategy, and risk management."*[2]

Large banks heavily contribute to climate change through their investments in and underwriting of fossil fuels expansion and other greenhouse gas emissions-intensive activities. Credit unions are far less likely to contribute substantially to climate change[3] but are equally susceptible to the consequences of physical risks with potentially fewer risk management options available due to geographic and /or sectoral concentration. Recognizing the limited capacity and resources of credit unions, the NCUA has a critical role to serve as (1) a financial regulator and supervisor that must consider microprudential and macroprudential implications of climate risk on its supervised institutions, (2) a central resource center on climate-related financial risks and opportunities for its credit unions and the communities they serve, and, (3) an advocate on behalf of FICUs and their members to the Financial Stability Oversight Council (FSOC) to which it is a voting member.

This includes raising awareness of the many inequalities embedded in the climate risk equation: that larger lenders are choosing to drive the growth of climate risk which will disproportionately harm low-income, underserved, and communities of color and their lenders, which themselves have far fewer resources to apply in managing climate risks. Meeting the needs of credit unions and their members will require coordinated policy solutions across regulators–and across the federal government–that recognize and remedy these resource imbalances, assess penalties on large lenders commensurate with currently externalized costs of their ongoing climate-harming

[2] "Proposed Guidance for New York State Regulated Banking and Mortgage Institutions Relating to Management of Material Financial Risks from Climate Change," *New York State Department of Financial Services*, December 2022. https://www.dfs.ny.gov/system/files/documents/2022/12/dfs_proposed_guidance_banking_mortgage_climate_change_202212.pdf

[3] Kat Tancock, "I Switched To A Credit Union To Help Fight Climate Change," *Chatelaine*. May 11, 2023. https://chatelaine.com/living/budgeting/credit-union-banks-environment/

activities, and encourage actual mitigation of climate-related financial risk, not merely risk transfer onto more vulnerable entities and the public.[4]

Credit unions play a critical role in equitable access to financial services.They make up one-third of all Community Development Financial Institutions (CDFIs)[5] and over half of FICUs are low-income designated.[6] Credit unions are critical financial institutions for community development and to low-income communities and communities of color; and yet, small credit unions or branches in these communities are disappearing, through liquidations,[7] and others through mergers—with 33 in the first quarter for 2023 alone.[8] The NCUA should recognize this as both a microprudential and macroprudential challenge. A recently proposed FSOC risk framework notes that liquidity and credit problems for low-income, minority, and underserved communities represent a financial stability issue.[9]

The NCUA should provide support for new market opportunities in green lending to open up new sources of public and private capital to credit unions of all sizes, with special consideration to credit unions that may struggle to access capital because they predominantly serve LMI and disadvantaged communities. With the right support, credit unions can play a valuable role in providing equitable climate investment to communities across the United States because of their experience in making smaller loans and community knowledge. The NCUA must collect data to be comfortable training examiners and otherwise supporting clean energy and other green financing to allow expansion of these portfolios at credit unions. Input to this RFI from credit unions will show that green loans can be good loans—even in low- and moderate-income communities—and demonstrate how credit unions have set up successful programs. Comments from others will also explain how demand from U.S. consumers for green lending products is high, but examiner inexperience with these novel products–that may well be safe and mitigate risk–sometimes discourages credit unions from participating. This can result in that demand being filled instead by banks, and in particular large banks which may offer on average lower

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[4] "Council Members," *U.S. Department of the Treasury*. https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/financial-stability-oversight-council/about-fsoc/council-members

[5] "Issue Brief: Credit Union community development financial institutions (CDFIs)," *National Association of Federally-Insured Credit Unions*, August 2022. https://www.nafcu.org/system/files/files/CDFIs%20Issue%20Brief%20-%20August%202022_0.pdf

[6] Column L in "List of Active Federally Insured Credit Unions," *NCUA*. 2023 Quarter 1. https://ncua.gov/analysis/credit-union-corporate-call-report-data

[7] Matthew Goldberg and René Bennett, "2012-2023 List of Failed Credit Unions," ed. Brian Beers, *Bankrate*, March 17, 2023, https://www.bankrate.com/banking/credit-unions/list-of-failed-credit-unions/

[8] Peter Strozniak, "NCUA Approves 33 Mergers in the First Quarter of 2023, Trending Downward," *Credit Union Times*, May 8, 2023, https://www.cutimes.com/2023/05/08/ncua-approves-33-mergers-in-the-first-quarter-of-2023-trending-downward/#:~:text=The%20largest%20credit%20union%20mergers,(Expanded%20services).

[9] "Analytic Framework for Financial Stability Risk Identification, Assessment, and Response," *Federal Register*, April 28, 2023, https://home.treasury.gov/system/files/261/FSOC-2023-Risk-Framework.pdf.

savings rates and higher loan rates than credit unions[10] and have less understanding of local community risks and opportunities.

High-Level Recommendations for the NCUA

1. Create permanent climate risk staff capacity at the NCUA to monitor climate-related financial risks and climate-related opportunities (e.g. clean energy transition opportunities) to FICUs, their members, and the SIF.
2. Produce tools, toolkits, and educational resources for climate-related risks *and* opportunities for FICUs and their members. These resources should be informed by responses to this RFI and by credit union working groups.
3. Conduct additional research and systemwide analysis of physical *and* transition risks to credit unions accounting for the localized knowledge many possess, the unique structure of credit unions compared to banks, and the various types that exist, in coordination with other prudential regulators.
4. Issue climate guidance and incorporate climate risk and green lending opportunities into current supervision, regulation, and consumer financial protection programs through examiner and staff training.
5. Advocate that FSOC and FSOC members act to mitigate the drivers of climate-related financial risk, including financed greenhouse gas emissions, for firms within their respective purviews, given the likely disproportionate impacts of physical risk on credit unions and the communities they serve, relative to larger lenders.

More details to these recommendations, and additional recommendations can be found throughout the comment below.

[10] "Credit Union and Bank Interest Rate Comparison," *MyCreditUnion.gov*, January 26, 2023, https://mycreditunion.gov/about-credit-unions/interest-rate-comparison.; Theresa Stevens, "What's the Difference between a Bank and a Credit Union?," *Forbes*, May 4, 2023, https://www.forbes.com/advisor/banking/difference-between-bank-and-credit-union/.

Physical Risk (Q1-Q3)

Climate-related Disasters

Beyond climate-induced macroeconomic impacts like rising inflation,[11] employment shocks,[12] lowered GDP,[13] and risks to the financial system broadly,[14] individual credit unions also face microprudential risks that could threaten their safety and soundness.

As credit unions' field of membership is often tied to a specific business sector or community, many will face significant concentration risk when compared to more diversified and larger institutions, as well as greater vulnerability to climate-induced asset impairment characteristic of the collateral for common credit union products: home mortgages and auto and small business loans. Credit unions need to understand the risks that they face, and thus need access to reliable and high quality climate and transition planning data and tools, and supervision and regulation from the NCUA to help them manage these growing risks and ensure safety and soundness.

The NCUA's Office of the Chief Economist found that the 25 percent of credit unions that are in communities at relatively high or very high risk of experiencing negative outcomes from natural hazards accounted for 34 percent of systemwide assets, or approximately $750 billion, at the end of 2021. Additionally, minority depository institutions which serve minority communities face substantially higher risks than the credit union system in aggregate.[15]

Notable among the challenges that credit unions face is that the use of historical data and local knowledge to predict climate disaster vulnerability are insufficient in a future with fast changing conditions. Future climate-related disasters like floods and fires will be bigger and more destructive than the events of the past, with new records set regularly.[16] Households, small

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[11] Simon Jessop and Mark John, "Analysis: Climate Change: Central Banks' New Inflation Puzzle," *Reuters*, June 8, 2021, https://www.reuters.com/world/uk/climate-change-central-banks-new-inflation-puzzle-2021-06-08/.

[12] Nicolas Maitre, Guillermo Montt, and Catherine Saget, "The Employment Impact of Climate Change Adaptation," *International Labour Organization*, August 2018, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_824865.pdf.

[13] "World Economy Set to Lose up to 18% GDP from Climate Change If No Action Taken, Reveals Swiss Re Institute's Stress-Test Analysis," *Swiss Re*, April 22, 2021, https://www.swissre.com/media/news-releases/nr-20210422-economics-of-climate-change-risks.html.

[14] Gregg Gelzinis and Graham Steele, "Climate Change Threatens the Stability of the Financial System," *Center for American Progress*, November 19, 2019, https://www.americanprogress.org/article/climate-change-threatens-stability-financial-system/.

[15] "NCUA Research Examines Credit Union Exposure to Climate-Related Physical Risks," *National Credit Union Administration's Office of the Chief Economist*, April 19, 2023. https://ncua.gov/newsroom/press-release/2023/ncua-research-examines-credit-union-exposure-climate-related-physical-risks#:~:text=The%20NCUA's%20research%20showed%3A,at%20the%20end%20of%202021

[16] See e.g, Daniel Amarante, "Record Flooding, Drought Part of Range of Weather Extremes in US This Summer," *ABC News*, September 22, 2022, https://abcnews.go.com/US/record-flooding-drought-part-range-weather-extremes-us/story?id=90173177.; "France Braces for Record Temperatures as Wildfires Rage across Europe," *The Guardian*, July 18, 2022,

businesses, and municipalities, and the financial institutions that serve them, are unlikely to be able to continually absorb greater losses and stay financially afloat. Direct costs are accompanied by substantial indirect costs; climate disasters can "lead to job losses and undermine economic output, reducing already limited household income and wealth and diminishing access to capital**.**"[17]

Over 11,000 credit union branches in 668 counties across the U.S. face physical risk related to ongoing climate disasters; however, the risk is not distributed equally.[18] Black, Indigenous, and people of color (BIPOC), low-income, immigrant, and Indigenous communities in particular, are disproportionately burdened by climate disasters in ways that can directly or indirectly impact borrowers' ability to repay their loans. As a result, MDIs are especially vulnerable with more than half at relatively high or very high risk of experiencing negative effects of climate change.[19] Climate risk is increasing across all regions,[20] thus all credit unions, even those currently in the low to relatively low-risk categories should monitor their exposure to climate risk.

Long-term Climate Impacts

Credit unions and the communities they serve will be impacted by climate migration and climate displacement, which may result in the closures of credit unions due membership loss. When too many individuals and businesses start withdrawing deposits from the same financial institution, this can rapidly lead to a bank run. As was seen with the Spring 2023 banking crisis, bank runs and bank failures can also have cascading effects that lead to broader instability when they trigger behavioral changes among consumers. If the NCUA inadequately prepares climate-vulnerable institutions for these risks, it could result in a general loss of confidence in the credit union system, and movement of money to banks. The loss of public trust may indirectly impact even credit unions who are not directly experiencing climate-related impacts yet.

Communities and consumers served by credit unions will need to contend with chronic issues resulting from climate change like higher temperatures and altered precipitation patterns which can

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https://www.theguardian.com/world/2022/jul/18/france-braces-for-record-temperatures-as-wildfires-rage-across-europe.; Christopher Ingraham, "Analysis | Houston Is Experiencing Its Third '500-Year' Flood in 3 Years. How Is That Possible?," *The Washington Post*, November 24, 2021, https://www.washingtonpost.com/news/wonk/wp/2017/08/29/houston-is-experiencing-its-third-500-year-flood-in-3-years-how-is-that-possible/.; Rosemry Izaguirre, "Worst Fires in California History: Dixie, Camp and More," *Los Angeles Times*, August 24, 2021, https://www.latimes.com/california/story/2021-08-24/worst-fires-in-california-history-dixie-camp-and-more.

[17] National Credit Union Administration (NCUA). "Climate-Related Financial Risk - Request for Information" *Federal Register*, June 15, 2023. https://www.federalregister.gov/d/2023-08715

[18] Hofheimer, George, Taylor C. Nelms, and Jim Scott. "The Changing Climate for Credit Unions" *Filene Research Institute,* (2022). https://filene.org/learn-something/reports/the-changing-climate-for-credit-unions

[19] "Estimating Credit Union Exposure to Climate-Related Physical Risks," *NCUA*, April 4, 2023, https://ncua.gov/news/publication-search/climate-financial-risk/estimating-credit-union-exposure-climate-related-physical-risks.

[20] Jonathan Woetzel et al., "Climate Risk and Response: Physical Hazards and Socioeconomic Impacts," *McKinsey Company*, January 16, 2020, https://www.mckinsey.com/capabilities/sustainability/our-insights/climate-risk-and-response-physical-hazards-and-socioeconomic-impacts.

disrupt industries like agriculture, fishing, and tourism. Climate migration will also negatively affect many communities which have already been burdened by climate change impacts leading to a feedback loop of depopulation and decreased demand for goods and services, according to the U.S. Commodities Future Trading Commission (CFTC) report on managing climate risk.[21] Frontline and low-income communities and communities of color will bear the heaviest economic burdens. The CFTC lists (Table 3.1) sectors such as hospitality, power generation, transportation, and energy-intensive industrial sector's equities and debts as being likely to face physical or transition risk impacts.[22]

Additionally, there will continue to be an increase in public health impacts which will both increase costs and decrease economic productivity.[23] Extreme heat will harm productivity and health,[24] particularly of outdoor workers in rural and urban workforces across the country, increasing the need for public services and public health measures, decreasing local and state tax revenue, and potentially disrupting essential services such as infrastructure development and maintenance, law enforcement, and food harvesting.

Climate Economic Impacts by the Numbers

While we cannot forecast the exact timing and location of climate disasters, we know the economic costs are staggering, growing, and consistently underestimated by economists and markets.[25] Since 1980, the United States has experienced 348 major weather and climate disasters with total costs exceeding $2.5 trillion dollars. In 2022 alone, 18 separate weather and climate disasters cost the U.S. $171 billion dollars all together in direct damages.[26] Munich Re found that global losses from weather disasters are growing, reaching $270 billion in 2022 with

[21] "Managing Climate Risk in the U.S. Financial System," *U.S. Commodity Futures Trading Commission*, September 2020. https://www.cftc.gov/sites/default/files/2020-09/9-9-20%20Report%20of%20the%20Subcommittee%20on%20Climate-Related%20Market%20Risk%20-%20Managing%20Climate%20Risk%20in%20the%20U.S.%20Financial%20System%20for%20posting.pdf

[22] "CFTC's Climate-Related Market Risk Subcommittee Releases Report," *CFTC*, September 9, 2020, https://www.cftc.gov/PressRoom/PressReleases/8234-20.

[23] See E.g, Union of Concerned Scientists analysis on impacts to outdoor workers from climate change found that, "extreme heat would cause tens of millions of outdoor workers in the US to risk losing a collective $55.4 billion in earnings each year by midcentury."

[24] See E.g, "Heat and Health," *World Health Organization*, June 1, 2018, https://www.who.int/news-room/fact-sheets/detail/climate-change-heat-and-health.; Ciara Nugent, "How Extreme Heat Hurts Jobs and the Economy," *Time*, August 31, 2021, https://time.com/6093845/how-heat-hurts-the-economy/.; Natalie Grover, "Why More Heatwaves Endanger Our Health and Ability to Work," *Horizon Magazine*, August 1, 2022, https://ec.europa.eu/research-and-innovation/en/horizon-magazine/why-more-heatwaves-endanger-our-health-and-ability-work.

[25] Harris, Lee, "Rise of the Climate Rating Agencies," *The American Prospect*, April 12, 2023. https://prospect.org/economy/2023-04-12-rise-climate-rating-agencies/?is_rec=true&topic_id=economy&source=article

[26] "U.S. Billion-Dollar Weather and Climate Disasters," *NOAA National Centers for Environmental Information (NCEI)*, 2023. https://www.ncei.noaa.gov/access/billions/. DOI: 10.25921/stkw-7w73

only 45 percent of those losses insured ($120 billion); before 2005 insured losses never exceeded $50 billion.[27]

Markets are also drastically mispricing climate risk, leading to the growth of climate and carbon bubbles. For example, real estate in the U.S. is estimated to be overvalued by $121-237 billion due to unpriced flood risk driven by climate change.[28] Low-income households face the greatest risk of losing home equity,[29] the same segment of consumers that were most affected by the housing crash of 2007-08 that led to the financial crisis.

Climate-related financial risks will grow over time, in scope and reach, but the risks and indirect and direct financial impacts are happening right now. Climate risk is already having a clear and direct impact on property insurance,[30] which also lacks federally-standardized prudential regulation.

Risk Management Not Risk Retreat

Credit unions cannot be permitted to manage their climate risks by simply withdrawing from serving vulnerable areas and segments of consumers, as this approach only further exacerbates existing inequalities. Decades of racist housing, lending, and siting policies that denied households and communities of color equitable access to fair housing and to financial services have resulted in massive racial and economic disparities in climate vulnerability, environmental justice, and public health.[31]

The NCUA should work with credit unions to manage climate risk in ways that do not lead to disparate impacts based on race or economic status. Credit unions should *expand* their fields of membership by creating opportunities for members to enhance climate resilience of property, infrastructure, and businesses, and to mitigate climate risk and promote climate, racial, and economic justice. See more in the "Suggestions for NCUA" section below.

Looking to Farmers

One sector that the NCUA should look to, where climate risk management is urgently needed and where there are opportunities for climate smart investment is the farming industry,

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[27] "Insured Losses Hit $120 Billion as Extreme Weather Spreads," *Bloomberg*, January 9, 2023. https://www.bloomberg.com/news/articles/2023-01-09/insured-losses-hit-120-billion-as-extreme-weather-upends-norms?sref=f7rH2jWS

[28] Jesse D. Gourevitch, Carolyn Kousky, Yanjun (Penny) Liao, Christoph Nolte, Adam B. Pollack, Jeremy R. Porter & Joakim A. Weill, "Unpriced climate risk and the potential consequences of overvaluation in US housing markets," *Nature Climate Change*, February 16, 2023.

[29] Ibid.

[30] Caroline Nagy, "State Farm Abandons Californians by Canceling Fire Coverage," *The Sacramento Bee*, June 21, 2023, https://www.sacbee.com/opinion/op-ed/article276447906.html.

[31] Daniel Cusick, "Past Racist 'Redlining' Practices Increased Climate Burden on Minority Neighborhoods," *Scientific American*, January 21, 2020, https://www.scientificamerican.com/article/past-racist-redlining-practices-increased-climate-burden-on-minority-neighborhoods/.

particularly as independent, small farmers and ranchers need ongoing credit union support to make the transition to more climate smart and resilient agriculture.[32] Farmers have already begun seeing more persistent weather-related losses and have needed to respond by adjusting their practices to accommodate longer term shifts in the climate. Creating climate-smart lending platforms for small farmers could be a way for credit unions to appropriately incorporate climate risk in their loan portfolios while simultaneously incentivizing the adoption of climate-smart farming practices,[33] and this dual purpose model should be considered for financing all essential transitioning industries including energy production.

Credit unions should consider portfolio growth in small, climate-smart farms,[34] and the NCUA should help support innovation from credit unions for small farmers in states with concentrated agricultural portfolios. For example, this method could be deployed in North Dakota where there is a high proportion of agriculture, 34 credit unions hold $748 million in agricultural loans with about 11 of these 34 credit unions considered agricultural based on business volume. Across all 34, agricultural loans make up on average 25% of the loan portfolios.[35] To continue to provide food security for the nation, the industry requires flexible financing support as climate change creates more instances of fires, floods, and droughts that impact productivity.

Transition Risk (Q4-Q6)

The NCUA should promote portfolio diversification, including through expanded green finance, as a way to mitigate climate-related transition risk stemming from concentrated exposure to volatile and/or declining industries. Credit unions are not the typical financiers of carbon-intensive industries which face transition risk (such as coal, oil, and gas), but they and their members are not completely exempt from it either.

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[32] "Partnerships for Climate-Smart Commodities," *U.S. Department of Agriculture*. https://www.usda.gov/climate-solutions/climate-smart-commodities; Chania Frost, Kartik Jayaram, and Gillian Pais, "What climate-smart agriculture means for smallholder farmers," *McKinsey & Company*, February 28, 2023. https://www.mckinsey.com/industries/agriculture/our-insights/what-climate-smart-agriculture-means-for-smallholder-farmers

[33] Randy Rakhmadi and Angela Falconer, "Climate-Smart Lending Platform," *Climate Policy Initiative*, September 25, 2015. https://www.climatepolicyinitiative.org/climate-smart-lending-platform/

[34] Jim O'Brien, "Credit Unions Should Strongly Consider AG Lending," *Credit Union Times*, September 30, 2022, https://www.cutimes.com/2022/09/30/credit-unions-should-strongly-consider-ag-lending/.

[35] Schlecht, Jenny, "Don't penalize ag over climate change concerns, North Dakota Gov. Doug Burgum warns credit union agency," *AGWeek*. January 25, 2022. https://www.agweek.com/news/dont-penalize-ag-over-climate-change-concerns-north-dakota-gov-doug-burgum-warns-credit-union-agency

Current fossil fuel assets face losses of around $1 trillion,[36] and worse still banks are continuing to finance fossil fuel expansion.[37] Troubling pockets of concentrated transition risk are growing in regional oil patch lenders[38] and in private equity,[39] for example. Similar to Silicon Valley Bank's overexposure to the technology sector, oil patch (or other fossil fuel) credit unions might hold deposits and provide loans for both oil companies and oil employees. General downturn in the industry will affect businesses *and* employees ability to repay loans and could lead to deposit flight or bank runs. An example of what credit unions and other financial institutions can expect comes from financial institutions' struggles and failures in the oil patch in the 1980s. Financial institutions in the South, particularly Texas, experienced a crisis due to the region's concentrated dependency on oil and the drop in oil prices. This led to the failure of 425 Texas commercial banks, including 9 of the state's 10 largest bank holding companies.[40]

Correlated risks are important for the NCUA to consider in supporting safety and soundness of credit unions when incorporating climate risk. Credit unions usually have large auto loan portfolios, which means these portfolios not only have a large carbon impact from traditional combustion engine vehicles but could see loss of aggregate collateral value[41] if there is a swift transition to electric vehicles (EVs). Federal and state policies have already begun to incentivize or encourage EVs, and public funding and financing will encourage shifts in private financing as well.

At the federal level, the Biden-Harris Administration announced in September 2022 approval of Electric Vehicle Infrastructure Deployment Plans for all states and territories, as part of its National Electric Vehicle Infrastructure (NEVI) Formula Program, established and funded by the Bipartisan Infrastructure Law. NEVI provides more than $1.5 billion to help build electric vehicle chargers covering approximately 75,000 miles of highway across the country.[42]

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[36] Gregor Semieniuk, Philip B. Holden, Jean-Francois Mercure, Pablo Salas, Hector Pollitt, Katharine Jobson, Pim Vercoulen, Unnada Chewpreecha, Neil R. Edwards & Jorge E. Viñuales, "Stranded fossil-fuel assets translate to major losses for investors in advanced economies," *Nature Climate Change*, May 26, 2022. https://www.nature.com/articles/s41558-022-01356-y

[37] "Banking on Climate Chaos: Fossil Fuel Finance Report," *Rainforest Action Network, Banktrack, Indigenous Environmental Network, Oil Change, Reclaim Finance, Sierra Club, and Urgewald*, 2023. https://www.bankingonclimatechaos.org

[38] Monga, Vipal, "Billionaire George Kaiser's Bank Drills Deeper Into the Oil Patch," *The Wall Street Journal*, May 7, 2022. https://www.wsj.com/articles/billionaire-george-kaisers-bank-drills-deeper-into-the-oil-patch-11651866929

[39] Hiroko Tabuchi, "Private Equity Funds, Sensing Profit in Tumult, Are Propping up Oil," *The New York Times*, October 13, 2021, https://www.nytimes.com/2021/10/13/climate/private-equity-funds-oil-gas-fossil-fuels.html.

[40] "Banking problems in the southwest," *FDIC*, accessed June 24, 2023, https://www.fdic.gov/bank/historical/history/291_336.pdf.

[41] Since vehicles serve as collateral for the loan, if the borrower does not repay the loan, the credit union would get the car, but the value the credit union can get for selling the car could be lower than expected if gasoline vehicle sales decline with an uptake of demand for EVs. In the aggregate, this could mean that a credit union takes an overall loss on its auto-line if the default rate gets too high and they have to sell the vehicles to a used auto dealer at a steep discount from what they paid the original dealer.

[42] "Historic Step: All Fifty States plus D.C. and Puerto Rico Greenlit to Move EV Charging Networks Forward, Covering 75,000 Miles of Highway," *U.S. Department of Transportation*, accessed June 23, 2023,

Forty-five states and the District of Columbia are providing incentives for certain EVs and/or plug-in hybrid vehicles, through state legislation or a utility operating in the state. The types of incentives include tax credits or rebates, fleet acquisition goals, and exemptions from emissions testing or utility time-of-use rate reductions.[43] Additionally, California's 2022 Advanced Clean Cars II (ACC II) rule, sets a gradually increasing requirement for sales of zero-emission vehicles (ZEVs) up to 100% in 2035. Seventeen states—nearly 38% of the U.S. car market—are contemplating or have already adopted these standards, and, "New Energy Innovation Policy & Technology LLC® modeling shows if all 17 states adopt ACC II, more than 75% of all cars on the road in the U.S. could be EVs by 2050."[44]

On top of public laws and policies, the private auto industry, including major automakers, has also made commitments to switch to hybrid vehicles or EVs. For example, BMW, Ford, Honda, Hyundai, and Volkswagen have all voluntarily committed to increase their production and sale of EVs over the next decade.[45] Additionally, Mercedes and Volvo have each committed to go fully electric by 2030. General Motors (GM) plans to stop selling gas and diesel vehicles by 2035.[46]

Governance (Q8-Q12)

Even at the smallest institutions, climate risk is a financial risk that must be incorporated into all functions of the credit union and subject to formal oversight by the board. In order for climate risk management to be successfully implemented, the Task Force on Climate-Related Financial Disclosures (TCFD) recommends disclosure of the board's oversight of climate-related risks and opportunities and management's role in assessing and managing climate-related risks and opportunities.[47] The NCUA should guide credit union senior management to make clear the connections between their climate-related risks and their governance, strategy, risk management, and metrics and targets.

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https://www.transportation.gov/briefing-room/historic-step-all-fifty-states-plus-dc-and-puerto-rico-greenlit-move-ev-charging.

[43] "Brief State Policies Promoting Hybrid and Electric Vehicles," *National Conference of State Legislatures*, accessed June 23, 2023, https://www.ncsl.org/energy/state-policies-promoting-hybrid-and-electric-vehicles.

[44] Robbie Orvis, "Seventeen States Could Accelerate U.S. Electric Vehicle Sales to 75% by 2050," *Forbes*, April 11, 2023, https://www.forbes.com/sites/energyinnovation/2023/04/10/seventeen-states-could-accelerate-us-electric-vehicle-sales-to-75-by-2050/?sh=16117a325289.

[45] Oskaras Alsauskas et al., "Global EV Outlook 2023 – Analysis," *IEA*, April 2023, https://www.iea.org/reports/global-ev-outlook-2023.

[46] Jim Motavalli, "Every Automaker's EV Plans through 2035 and Beyond," *Forbe*s, October 27, 2022, https://www.forbes.com/wheels/news/automaker-ev-plans/.

[47] See Page 19 for more detail: "Final Report Recommendations of the Task Force on Climate-Related," *Task Force on Climate-related Financial Disclosures*, June 15, 2015, https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf.

Business Strategies (Q13-Q18)

Managing climate risk also means diversifying product and service offerings in emerging and promising spaces, such as green lending portfolios (see Climate-related Opportunities section below).

Risk Management (Q19-Q27)

Vulnerable Populations
When credit unions, and the NCUA, consider climate change in analyzing existing risk factors, they should include the risk of adverse effects of climate change on financially vulnerable populations, including lower-income communities, communities of color, Native American, and other disadvantaged or under-resourced communities. For more detail, see the "Fair Lending Considerations, Vulnerable Communities, and Bluelining" in the "Suggestions for NCUA" section below.

Operational Resilience
Credit unions serve many individuals and businesses in communities across the country, and it should be the goal of the NCUA to support the continued safe, sound, **and resilient** operations of these institutions. Credit unions have an important role to play in providing critical financial services, especially during times of need such as following a climate-related disaster. As such, credit unions have already been acting as climate impact first responders, and NCUA should expand its support to credit unions for post-disaster response, and pre-disaster climate mitigation and resilience.

Through input from this RFI, the NCUA should provide updated best practices and guidance for credit union Disaster Recovery Plans and Business Resumption Contingency Plans.[48] The NCUA should also update its examination questionnaire (Disaster Preparedness reviews) and train examiners in reviewing the key elements of disaster preparedness and response planning given present understanding of climate risks from economists and scientists.[49] Credit unions are already required to develop such plans, but this issue has been under attended to by examiners. The rising threat of climate-related natural disasters to more credit unions and input provided from credit unions through this RFI should enable the NCUA to build these plans out further.

The NCUA should continue to source on-the-ground knowledge, case studies, and best practices directly from credit unions already in the midst of their climate resilience and climate risk mitigation efforts. For example, the Louisiana Federal Credit Union in LaPlace, Louisiana which

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[48] "Disaster recovery and business resumption contingency," *NCUA*, December 2001, https://ncua.gov/files/letters-credit-unions/LCU2001-21.pdf.
[49] "Disaster Planning and Response," *NCUA*, April 1, 2006, https://ncua.gov/regulation-supervision/letters-credit-unions-other-guidance/disaster-planning-and-response.

has $278 million assets under management and 31,278 members has experienced at least two hurricanes, and out of necessity has developed robust disaster recovery practices. Louisiana FCU understands the many needs of staff and members, such as having cash on hand, which is more useful than debit and credit cards in the event of a major storm, comprehensive crisis communications plan for staff as well as communication to members, technical assistance to review insurance plans and make claims, and more.[50] The Louisiana Credit Union League and the National Credit Union Foundation partnered to create the Louisiana Credit Union Foundation which provides educational opportunities for credit union professionals, and provides financial assistance for statewide disaster relief efforts including offering immediate grants to credit unions after a hurricane impacts an area of the state.[51]

Credit unions increasingly face all types of climate-related natural disasters. Over the past decade, Redwood Credit Union (Redwood), with $7.6 billion in assets, in Santa Rosa, California has helped members through numerous wildfires. When several members and employees lost their homes to wildfires they offered zero-interest loans, temporary childcare, housing and meals for displaced staff and donated emergency funds to area survivors. Funds which came from a nonprofit fire relief fund that Redwood created in partnership with California State Senator Mike McGuire and local news organization *The Press Democrat.* When a fire left millions without power, Redwood stayed open, operating their branches with generators and air purifiers.[52]

Credit union risk management strategies should also include climate opportunities (see Climate-related Opportunities section below), because credit unions helping improve climate-readiness of their borrowers will help them manage their own risks.

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[50] Peter Strozniak, "Will Your Credit Union Be Ready for the next Natural Disaster?," *Credit Union Times*, January 4, 2019, https://www.cutimes.com/2019/01/04/will-your-credit-union-be-ready-for-the-next-natural-disaster/.

[51] "Louisiana Credit Unions Reflect on Shared Branching Accomplishment 10 Years after Hurricane Katrina," *Biz New Orleans*, August 8, 2015, https://www.bizneworleans.com/louisiana-credit-unions-reflect-on-shared-branching-accomplishment-10-years-after-hurricane-katrina/.; "Louisiana Foundation," *LCUL*, accessed June 26, 2023, https://lcul.com/Initiatives/Louisiana-Foundation.

[52] Victoria Zhuang and Frank Gargano, "More than 60% of Credit Unions at Risk for Climate-Related Losses: Report," *American Banker*, June 13, 2022, https://www.americanbanker.com/creditunions/news/more-than-60-of-credit-unions-at-risk-for-climate-related-losses-report.

Climate Vulnerability Analysis
The TCFD defines scenario analysis as, "a process for identifying and assessing the potential implications of a range of plausible future states under conditions of uncertainty. Scenarios are hypothetical constructs and not designed to deliver precise outcomes or forecasts. Instead, scenarios provide a way for organizations to consider how the future might look if certain trends continue or certain conditions are met."[53] Many credit unions are attuned with their local communities and environment. For example, when FEMA maps are out of date, they might be able to gauge which neighborhoods are more likely to experience flooding. But, as mentioned in the beginning of this letter, to understand future impacts of climate change historical data and personal experiences alone are insufficient. Risk can only be managed if anticipated, and the NCUA should provide more research and analysis for these risks based on scientific modeling.

The NCUA should begin conducting its own systemwide 30-year climate scenario analysis exercise to assess the landscape of correlated physical and transition risks facing the credit union system and the SIF. The purpose of the analysis should be to determine which regions and portfolios face the most significant challenges, and where additional supervision or regulatory support is required to help credit unions stay open, manage their risks, and ensure safe, sound and sustainable operations. Five, ten, and twenty year components should be included, recognizing that climate impacts are already occurring in climate-vulnerable regions to institutions of all sizes, and will grow substantially over the coming decades.

The NCUA could benefit from coordination with other federal- and state-level agencies that are already thinking about climate scenario analysis and stress testing for smaller institutions. For example, New York State Department of Financial Services (NYDFS) in their proposed climate guidance asked stakeholders: "Recognizing that there is a wide range of complexity in climate scenario analysis, how can smaller institutions benefit from climate scenario analysis? What does appropriate climate scenario analysis look like for them? Which kind of support do they need in establishing these scenarios?"[54] The NCUA should ask NYDFS for the feedback they received on this question and incorporate it into their analysis and planning.

The NCUA should take a proactive approach to risk management, as financial institutions and regulators must imagine extreme but plausible scenarios that will never be fully predicted or fully described by forward-looking economic modeling. Analysis needs to incorporate events in series and in parallel, rather than as discrete perturbations, and reflect the fact that previous resilience following disasters does not ensure future solvency. Tier III credit unions, the largest

[53] "Recommendations of the Task Force on Climate-Related Financial Disclosures*," Task Force on Climate-Related Financial Disclosures*, June 15, 2017, https://www.fsb-tcfd.org/recommendations/.
[54] "Proposed Guidance for New York State Regulated Banking and Mortgage Institutions Relating to Management of Material Financial Risks from Climate Change," *New York State Department of Financial Services*, December 2022.
https://www.dfs.ny.gov/system/files/documents/2022/12/dfs_proposed_guidance_banking_mortgage_climate_change_202212.pdf

with $20 billion or more in covered assets,[55] should be considered first by the NCUA for individual climate scenario analysis exercises, which should use a qualitative and narrative approach[56] grounded in the realities of climate science. The Federal Reserve is already working on using a narrow set of climate and transition scenarios[57] which are a necessary first step and will need to be improved upon in subsequent rounds.[58]

Climate-related Opportunities (Q29-Q33)

Green Lending Market

As with any global or national economic transition in history, climate change need not be viewed only for its risks and consequences, but should be seen as providing opportunities in new areas of investment and market growth. Green portfolios offer opportunities for attracting new membership by offering localized expertise in green lending products that will most benefit a particular credit union's community. Green portfolios can include clean energy (e.g. solar) and electric vehicle (EV) financing, energy efficiency, building electrification, and green mortgages, all of which will be critical in the green transition and likely see an increase in demand from consumers. The NCUA should recognize that many of these products may fit into existing recognized loan categories (e.g. "unsecured consumer loans" are often used for solar and "home improvement loans" are often used for electrification, heat pumps, and energy efficiency), and provide guidance to better inform credit unions on how to underwrite and market these products for consumers.

Some credit unions are already taking proactive steps to participate in the transitioning economy's new market opportunities by providing green lending to their members. Examples of these credit unions that the NCUA should seek input from include: Clean Energy Credit Union,[59]

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[55] "National Credit Union Administration §723," *National Credit Union Administration*, accessed June 26, 2023, https://www.govinfo.gov/content/pkg/CFR-2021-title12-vol7/pdf/CFR-2021-title12-vol7-part723.pdf.
[56] Mair, Vibeka, "Climate scenarios: 'Narratives eat modelling for breakfast'," *Capital Monitor*, August 3, 2022. https://capitalmonitor.ai/factor/environmental/climate-scenarios-narratives-eat-modelling-for-breakfast/
[57] "Pilot Climate Scenario Analysis (CSA) Exercise: Participant Instructions," *The Federal Reserve* , January 19, 2023, https://www.federalreserve.gov/publications/climate-scenario-analysis-exercise-instructions.htm.; Avery Ellfeldt, "Explaining the Fed's Climate Test," *E&E News*, February 15, 2023, https://www.eenews.net/articles/explaining-the-feds-climate-test/.
[58] Mark Cliffe, "The Fed's Climate Complacency," *Project Syndicate*, February 14, 2023, https://www.project-syndicate.org/commentary/federal-reserve-climate-scenario-planning-falls-short-by-mark-cliffe-2023-02.; Nicholas Stern, Joseph E. Stiglitz, and Charlotte Taylor, "The Economics of Immense Risk, Urgent Action and Radical Change: Towards New Approaches to the Economics of Climate Change," *NBER*, February 15, 2021, https://www.nber.org/papers/w28472.; Alex Pui and Sebastian Werner, "Financial Risks of Climate Change: Piranhas or Red Herrings?," ed. Andy Pitman, *UNSW Sydney*, May 16, 2023, https://www.unsw.edu.au/news/2023/05/financial-risks-of-climate-change-piranhas-or-red-herrings.
[59] "Green Home Improvement Loans," *Clean Energy Credit Union*. https://www.cleanenergycu.org/personal/green-home-improvement-loans/

Self-Help Credit Union,[60] Clearwater Credit Union,[61] and Redwood Credit Union.[62] VSECU, a Vermont-based credit union, has a green loan portfolio[63] that currently accounts for more than 8% of total assets and the credit union has experienced an annual growth rate in their green lending of more than 30% over the past five years.[64]

In fact, credit union green loan investment doubled to over $400 million in 2021, with solar lending and electric vehicle (EV) financing as two significant product lines for green portfolio growth expected in the coming years,[65] in part based on substantial increases in public incentives. Now is the time for credit unions to be building market share in the green lending market; Inclusiv projects that over 1,750 credit unions will offer over $5 billion per year in accessible, affordable green loans over the next ten years.[66]

Leveraging Public Incentives

The NCUA needs to be prepared to disseminate information on opportunities from the Bipartisan Infrastructure Law[67] and the Inflation Reduction Act (IRA),[68] such as tax credits or other incentives, so that credit unions are in the best possible position to serve underserved communities. In particular, the Greenhouse Gas Reduction Fund (GGRF), a provision of the IRA, will provide indirect financing opportunities from the Environmental Protection Agency through nonprofit intermediary organizations and state or local governments to nonprofit community lenders like credit unions, CDFIs, and MDIs.[69] The GGRF's purpose is, "to mobilize private investment while delivering tangible benefits—including lower electricity bills, high-quality jobs, and reduced air pollution— in low-income and disadvantaged communities across our country." Many credit unions already serve the communities that the GGRF describes.

[60] "Environmental Loans," *Self-Help Federal Credit Union*. https://self-helpfcu.org/business/loans/commercial-loans/environmental-loans
[61] "Home Solar Loans," *Clearwater Credit Union*. https://clearwatercreditunion.org/home-loans/home-energy-loans/
[62] "Home Solar Loan," *Redwood Credit Union*. https://www.redwoodcu.org/loans/home/home-solar-loan/
[63] "Green Loans," *VSECU*, https://www.vsecu.com/personal/green-loans/
[64] "The Opportunities for Credit Unions in the Face of a Changing Climate," *Filene Research Institute*, July 21, 2022. https://filene.org/blog/the-opportunities-for-credit-unions-in-the-face-of-a-changing-climate
[65] Ibid.
[66] Ibid.
[67] "Investing in America," *The White House*, June 20, 2023, https://www.whitehouse.gov/build/.
[68] "Inflation Reduction Act (IRA) Overview: Climate and Clean Air-Related Provisions," *Environmental Protection Agency*, 2022. https://www.epa.gov/system/files/documents/2022-09/IRA%20Overview.pdf
[69] "EPA's Implementation Framework for the Greenhouse Gas Reduction Fund," *Environmental Protections Agency*, 3, April 19, 2023, https://www.epa.gov/system/files/documents/2023-04/GGRF%20Implementation%20Framework_730am.pdf.

Finally, the NCUA should also consult with the the Federal Housing Finance Agency and the Fannie Mae Green Financing Business[70] and Freddie Mac's GreenCHOICE Mortgages and Green Advantage programs[71] on pilots that could be done with credit union members.

NCUA Support for–and Standardization of–Green Financial Products
Currently regulators and examiners may be uncomfortable with evaluating many of the types of "novel" green lending products that are on the market. To address this gap, the NCUA should begin to standardize the information available and guidelines for the underwriting and examination of these products. The NCUA can start by collecting input from credit unions that already have these product lines in place (See "NCUA-Hosted Green Finance Working Group" section below). For greater ease of examiners and their supervised credit unions, the NCUA should develop: (1) clear definitions for loan structure/type; (2) underwriting guidance; and, (3) examiner training to support these green products.

The NCUA should provide guidance on green lending and reporting requirements, particularly for underserved communities, to provide confidence to even the smallest institutions in moving forward on these types of loans. To do this, the NCUA could survey credit unions who have successfully underwritten such loans, and transmit the specific policies and procedures that could be put in place to underwrite safe, non-predatory green financial products. Examiner training will be critical in facilitating the growth in this market segment for credit unions. Lack of clarity and training for examiners stands to slow down progress in green portfolios that credit unions are seeking. Training should recognize the balance of risk and risk management offered by green loan products by not overestimating the risks from these products which could result in discouraging their uptake.

Finally, the NCUA should consider running training programs or encourage credit unions to run programs for green lending, particularly for credit unions serving low-income and minority communities. A well-known example is the Inclusiv-University of New Hampshire Virtual Solar Lending Professional Training and Certificate Program, which has trained close to 200 community-based financial institutions to date.[72] The purpose of such training would be to demystify this emerging lending market and support lending portfolio diversification to reduce climate-related financial risk.

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[70] "Green Financing," *Fannie Mae*. https://multifamily.fanniemae.com/financing-options/specialty-financing/green-financing
[71] "GreenCHOICE Mortgages," *Freddie Mac*. https://sf.freddiemac.com/working-with-us/origination-underwriting/mortgage-products/greenchoice-mortgages?gclid=CjwKCAjwzuqgBhAcEiwAdj5dRrYONN2b27lmeK_-PIe3MptBAinD--tHuO2aCHRh2NSRoWaB-j7gUxoC5QcQAvD_BwE&gclsrc=aw.ds; https://mf.freddiemac.com/product/green-advantage
[72] Inclusiv Center for Resiliency and Clean Energy's Virtual Solar Lending Professional Training and Certificate Program. https://inclusiv.org/initiatives/center-for-resiliency-and-clean-energy/

NCUA-Hosted Green Finance Working Group

The NCUA should put together a regionally diverse working group or task force of credit unions that have been working with green financial products for long periods of time. It should be composed of credit unions that have a large percentage of green loans in their portfolios, because those that are more experienced will have a better sense of challenges and barriers, as well as successes. The purpose of this group should be to create a framework across this space for credit unions and examiners (see "NCUA Support for–and Standardization of–Green Financial Products" section above) which would help new credit unions move into the green financial product market through education and sharing of best practices and case studies. Inclusiv, as well as the Clean Energy Credit Union[73] with a green loan portfolio that includes residential solar loans, residential geothermal system loans, green home improvement loans, and a variety of clean energy transportation loans, are two examples of entities that would be valuable contributors to such a group.

The NCUA should look to credit unions not only for green lending knowledge, but also collect data on climate and environmental impacts. For instance, the United Nations Federal Credit Union outlines and tracks their climate goals and targets, and it hosts a United in Sustainability Summit which serves as an ongoing platform for credit unions and industry thought leaders to share information, tools and resources.[74] Clearwater Credit Union has reported on their environmental impacts, including their greenhouse gas emission impacts on their balance sheets,[75] and the UW Credit Union became the first credit union to receive the Environmental Protection Agency's Green Power Leadership Award.[76]

Suggestions for NCUA (Q34-Q35)

The NCUA should support credit unions by sharing industry best practices, providing guidance on how to manage the potential financial risks from climate change, convening workshops with the industry to discuss climate-related financial risk topics, and hosting educational seminars on how climate change may impact the financial system and individual credit unions. See "Operational Resilience" in the Risk Management section above for recommendations around Disaster Preparedness reviews.

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[73] "Our Mission," *Clean Energy CU*, March 3, 2023, https://www.cleanenergycu.org/about/our-mission/.

[74] "UNFCU Publishes 2021 Impact Report : United Nations Federal Credit Union," *UNFCU*, accessed June 15, 2023, https://www.unfcu.org/news-announcements/2021-impact-report/.; "United in Sustainability Summit," *United In Sustainability*, accessed June 15, 2023, https://www.uisnetwork.org/uis-summit/.

[75] "2020 Environmental Impact Assessment," *Clearwater Credit Union*, accessed June 15, 2023, https://clearwatercreditunion.org/files/2022/02/2020EIA.pdf.

[76] "Environmental Sustainability," UW Credit Union, accessed June 15, 2023, https://www.uwcu.org/about-us/our-values/environmental-sustainability/./; Greg Neumann, "Credit Unions: Taking on Climate Change Worldwide," *Credit Union Times,* June 28, 2019, https://www.cutimes.com/2019/06/28/credit-unions-taking-on-climate-change-worldwide/.

Climate Supervisory Guidance
The NCUA should publish climate supervisory guidance grounded in its statutory safety and soundness authority, while also incorporating robust fair lending considerations. This guidance should establish how credit unions must incorporate climate risk and associated racial and economic justice considerations into their governance, strategic planning, and risk management function across the traditional supervisory risk stripes, including operational risk, credit risk, market risk, liquidity risk, and reputational risk. The NCUA should also work with the Federal Financial Institutions Examination Council to develop appropriate guidance and training for examiners to incorporate climate risk into examinations. Alongside supervisory and regulatory guidance, climate-related financial risk analysis should be incorporated into CAMELS ratings.[77]

Community Reinvestment
The joint proposed rule to revise the Community Reinvestment Act (CRA)[78] should be finalized by the three federal banking regulators in 2023. Once finalized, NCUA staff should evaluate impacts and shifts that result from the revisions that may impact the market. Although the CRA is not directly applicable to credit unions, the proposed rule signals certain changes in the financial system which in turn will affect credit unions and their members. The Fed, OCC, and FDIC included in their 2022 proposed rule a proposed definition for disaster preparedness and climate resiliency which "...focuses on activities that assist individuals and communities to prepare for, adapt to, and withstand natural disasters, weather-related disasters, or climate-related risks."[79] This signals the agencies' acknowledgement of climate-related financial risk to low- and moderate income communities, communities that credit unions often serve.

The NCUA should also advocate on behalf of credit unions, through FSOC or bilaterally to the Fed, OCC, and FDIC on the need for banks to fulfill their mandates for community reinvestment in a way that does not allow banks to retreat from underserved communities. If banks are not held accountable, that leaves even more of the weight of community investment and resilience to credit unions, CDFIs, and others, even as these institutions have far less capital and resources than larger institutions.

Fair Lending Considerations, Vulnerable Communities, and Bluelining
The NCUA should create climate risk supervision practices that do not punish credit unions that are operating in risky areas, and should instead provide additional support and reward credit unions that have managed to remain resilient to climate-related financial risk. As financial institutions, including credit unions, begin to manage their own climate-related risks by reducing

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[77] "Camels Rating System," *NCUA*, March 8, 2022, https://ncua.gov/regulation-supervision/letters-credit-unions-other-guidance/camels-rating-system.
[78] "Proposed Rule: Community Reinvestment Act," *Comptroller of the Currency, Board of Governors of the Federal Reserve System, and the Federal Deposit Insurance Corporation*, June 3, 2022. https://www.federalregister.gov/documents/2022/06/03/2022-10111/community-reinvestment-act
[79] Ibid at page 33905.

lending in areas most susceptible to chronic or acute climate disasters, such as in flood- or wildfire- prone areas, this so-called "bluelining" is leaving vulnerable communities with even fewer resources to meet the ever-worsening impacts of climate change.[80]

The closing or merging of credit unions located in LMI and minority communities is not the solution. Examiners should be required to record when credit union closures or mergers are at least in part due to climate-related impacts, and to report that information back to other divisions at the NCUA. Safe and sound banking operations do not encourage the extension of unsafe or unsound credit.[81] This is precisely why it is important for the NCUA to provide climate risk mitigation and climate opportunity guidance to credit unions alongside supervision of climate risk, which can alleviate such concerns by credit unions and discourage raising costs to untenable levels or withdrawal of services that could constitute fair lending violations.

As noted in the RFI, "...absent any mitigating actions, changes in government policy, programs, or guidelines to transition to a less carbon-intensive economy may unintentionally increase the cost of homeownership in vulnerable communities."[82] Already there are signs of credit rationing in areas where climate change is exacerbating flood risk, and notably, mortgage availability is shifting towards wealthier borrowers.[83] Climate change impacts will continue to expand in scope and severity with time, causing a shift in the kinds of investments and financial services communities need in order to be prepared and protected. With this reality in mind, the banking and credit union systems must meet the changing credit needs of LMI communities and communities of color, rather than withdrawing, so that those most vulnerable to the impacts of climate change can access necessary, fair, and affordable capital and services to meet their financial needs.

The NCUA should incorporate climate risks and associated racial and economic justice factors within its fair lending examination framework to ensure credit unions do not discriminate or pursue policies that yield disparate impacts on climate-vulnerable communities, but rather remedy these factors. For example, by encouraging credit unions to strengthen financing for environmental sustainability and resilience, especially in climate-vulnerable or lower-wealth communities, credit unions can improve the climate resilience of their members.[84]

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[80] Jacobson, Lindsey. "Banks consider climate risk for home loans, a process called 'underwaterwriting' or 'blue-lining'." *CNBC*. September 2021. https://www.cnbc.com/2021/09/20/blue-lining-and-underwaterwriting-banks-consider-climate-change-risk.html

[81] "Community Reinvestment Act," *FDIC Division of Depositor and Consumer Protection*. https://www.fdic.gov/regulations/resources/director/presentations/cra.pdf;

[82] National Credit Union Administration (NCUA). "Climate-Related Financial Risk - Request for Information" *Federal Register*, June 15, 2023. https://www.federalregister.gov/d/2023-08715

[83] Sastry, Parinitha. "Who Bears Flood Risk? Evidence from Mortgage Markets in Florida." *MIT Sloan School of Management.* November 2021. https://psastry89.github.io/website/psastry_JMP.pdf

[84] Melissa Malkin-Weber et al., "The Climate Imperative and Community Finance," Self Help, February 2, 2021, https://www.self-help.org/docs/default-source/PDFs/climate-imperative--final-release-2102021.pdf?sfvrsn=2.

The NCUA should provide learning opportunities to credit unions to help them use new and existing tools to best reach the most climate vulnerable populations within the communities they serve. Utilizing tools that identify climate vulnerability can help direct funds to communities most in need of climate-related investment and communities of color most impacted by historic discrimination. One of the best tools currently available is the Climate and Economic Justice Screening Tool (CEJST) from the White House Council on Environmental Quality,[85] and used for implementing the Justice40 Initiative,[86] which could assist credit unions in targeting resources. The recently finalized version of the tool takes into account critical indicators that were left out of the draft version, including incorporating tribal nations and data regarding historic redlining practices.[87] The tool also displays demographic information for each census tract. Other federal tools are also available that can help illuminate environmental and socioeconomic burden in communities.[88]

Share Insurance Fund and Revolving Loan Fund

The NCUA should incorporate climate considerations into administration and risk management of the Share Insurance Fund (SIF).[89] The NCUA should use the results from systemwide climate scenario analysis exercises to assess the long term outlook for fund solvency under various conditions. This risk of insolvency is especially relevant given other compounding risk factors in the current economic environment including interest rate risks that contributed to 2023's banking crisis.

The NCUA should also incorporate climate into administration of the Community Development Revolving Loan Fund[90] and consider climate vulnerable communities in selecting credit unions for loans and technical grants. This overlap is incredibly relevant given the Fund's availability to only low-income designated or certified minority depository institutions and NCUA's Office of the Chief Economist's 2023 findings on disproportionate climate risks particularly for MDIs.[91] The

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85 "Climate and Economic Justice Screen Tool," *Screeningtool.geoplatform.gov*, accessed June 26, 2023, https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5.

86 "Justice40 Initiative," *The White House*, April 21, 2023, https://www.whitehouse.gov/environmentaljustice/justice40/.

87 "Biden-Harris Administration Launches Version 1.0 of Climate and Economic Justice Screening Tool, Key Step in Implementing President Biden's Justice40 Initiative." *The White House*. November 2022. https://www.whitehouse.gov/ceq/news-updates/2022/11/22/biden-harris-administration-launches-version-1-0-of-climate-and-eco nomic-justice-screening-tool-key-step-in-implementing-president-bidens-justice40-initiative/

88 "Factsheet: Climate Vulnerability and Banking," *Americans for Financial Reform and the Greenlining Institute*, January 4, 2023. https://ourfinancialsecurity.org/wp-content/uploads/2023/01/Memo_Climate-Vulnerability-CRA_Final.pdf

89 "Share Insurance Fund Overview," *National Credit Union Administration* , July 31, 2019, https://ncua.gov/support-services/share-insurance-fund#:~:text=The%20National%20Credit%20Union%20Share%20Insurance%20Fund%20was%20created%20by,individual%20accounts%20up%20to%20%24250%2C000.

90 "Applications for the 2023 Community Development Revolving Loan Fund Must Be Submitted by June 30," *NCUA*, April 5, 2023, https://ncua.gov/news/events/2023/applications-2023-community-development-revolving-loan-fund-must-be-submitted-june-30.

91 "NCUA Research Examines Credit Union Exposure to Climate-Related Physical Risks," *National Credit Union Administration's Office of the Chief Economist*, April 19, 2023.

NCUA should encourage and incentivize credit union recipients to enhance climate resilience for their own operations and for the communities and households they serve, including by expanding fields of membership to offset untenable concentration of climate risk, and by working with members and providing them with needed financial services with fair and appropriate terms to improve the climate resilience of their homes, vehicles, business operations, and local communities.

Resources and Tools

The NCUA should incorporate climate risk into their financial literacy resources and tools to help credit unions and their members understand how climate change could affect the valuation of their assets and their financial security. Federal Emergency Management Agency (FEMA) flood maps are notoriously out of date for example,[92] and consumers and credit unions will need the resources and support of the NCUA to manage risks to real property and businesses as climate change and human development in flood-prone or other disaster-prone areas yields ever increasing annual damages. The NCUA should add climate risk tools, data, and dedicated outreach to its ACCESS program which seeks to "foster financial inclusion in minority, undeserved, and unbanked populations"[93] —communities which also frequently face disproportionate climate vulnerability and lack access to financial services to prepare for and recover from disasters.

The NCUA can model climate risk tools and resources from ones existing on other areas of risk, and by incorporating climate risk into current data collection. The NCUA should host more webinars like the one hosted in partnership with FEMA in September 2022 on how credit unions and their members can prepare for, and remain resilient in the face of, climate-related disasters.[94] The NCUA should develop more in-depth and specific resources for climate risk such as toolboxes,[95] tools,[96] updated Examiner's Guide,[97] and letters to credit unions and other guidance with updated risk management expectations.[98]

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https://ncua.gov/newsroom/press-release/2023/ncua-research-examines-credit-union-exposure-climate-related-physical-risks#:~:text=The%20NCUA's%20research%20showed%3A,at%20the%20end%20of%202021

[92] Thomas Frank, "Studies Sound Alarm on 'Badly out-of-Date' FEMA Flood Maps," *Scientific American*, February 27, 2020, https://www.scientificamerican.com/article/studies-sound-alarm-on-badly-out-of-date-fema-flood-maps/.

[93] "Access Initiative," *NCUA*, October 26, 2022, https://ncua.gov/support-services/access.

[94] "Register Now for Webinar on Climate-Related Preparedness," *National Credit Union Administration*, September 15, 2022, https://ncua.gov/news/events/2022/register-now-webinar-climate-related-preparedness.

[95] For example, looking at NCUA's Automated Cybersecurity Evaluation Toolbox: "ACET and Other Assessment Tools," *National Credit Union Administration*, October 28, 2021, https://ncua.gov/regulation-supervision/regulatory-compliance-resources/cybersecurity-resources/acet-and-other-assessment-tools.

[96] For example, adapting the simplified Current Expected Credit Losses (CECL) tool for green portfolios: "The Simplified Cecl Tool," *National Credit Union Administration*, September 14, 2022, https://ncua.gov/regulation-supervision/regulatory-compliance-resources/cecl-resources/simplified-cecl-tool.

[97] "Examiner's Guide," *National Credit Union Administration*, November 6, 2018, https://ncua.gov/regulation-supervision/manuals-guides/examiners-guide.

[98] See example: "Updates to Interest Rate Risk Supervisory Framework," *National Credit Union Administration*, September 1, 2022,

Consumer and Tenant Protections
The NCUA needs to coordinate with the Consumer Financial Protection Bureau (CFPB) to disseminate information on consumer protections for new green lending projects to credit unions and to their members. There will likely be an influx of predatory providers alongside the influx of capital for green financing products. The NCUA should work with the CFPB and other relevant agencies to deliver guidance on new green financial products that are developed or scaled as a result of the injection of capital from the GGRF. The agencies should begin work now on initial guidance on consumer protections for green financial products ahead of the products being marketed to consumers. The agencies should educate lenders in all of the competitions and require them to include warning disclaimers of potential scams on outgoing marketing materials in addition to listing the phone number to submit a complaint to the CFPB. The NCUA should also engage with CFPB staff on its current rulemaking to establish consumer protections for residential Property Assessed Clean Energy loans.[99] Even after guidance, the NCUA should support CFPB and other agencies' enforcement efforts against predatory providers of green financial products.

NCUA staff should seek input from project implementation and consumer protection experts, as well as experienced lenders, to proactively mitigate these challenges.

Rental homes and tenants should be top of mind for the NCUA; renters make up about one-third of the US population. In addition, BIPOC individuals have lower rates of homeownership than white individuals, and they spend more money on rent.[100] Even though it may pose a significant challenge, the NCUA should ask credit unions if they have seen successful examples of getting landlords to take out green loans, such as for energy efficiency, which may financially benefit their tenants more so than them. *What motivated or incentivized them to do so? What types of loans?* A large majority of lenders will only do owner-occupied solar loans, but there are a broad array of green financing opportunities that should also benefit tenants through alleviation of energy, health, or other burdens.

Additionally, the NCUA should support tenant-friendly policies such as rent stabilization, anti-displacement, and anti-gentrification measures, and address the special circumstances facing renters when it comes to accessing financing to improve the health and safety of their homes and

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https://ncua.gov/regulation-supervision/letters-credit-unions-other-guidance/updates-interest-rate-risk-supervisory-framework-0.

[99] "CFPB Proposes New Consumer Protections for Homeowners Seeking Clean Energy Financing," *Consumer Financial Protection Bureau*, May 1, 2023. https://www.consumerfinance.gov/about-us/newsroom/cfpb-proposes-new-consumer-protections-for-homeowners-seeking-clean-energy-financing/

[100] "More Americans Own Their Homes, but Black-White Homeownership Rate Gap is Biggest in a Decade," *National Association of Realtors*, March 2, 2023. https://www.nar.realtor/newsroom/more-americans-own-their-homes-but-black-white-homeownership-rate-gap-is-biggest-in-a-decade-nar; DeArbea Walker, "People of color pay higher rental fees than their white peers," *Insider*, April 11, 2022. https://www.insider.com/people-of-color-pay-more-to-rent-an-apartment-2022-4

communities. Renters face additional barriers to accessing opportunities to invest in their homes, as landlords need to be incentivized to make these investments on behalf of their residents while tenants need to be protected from potential financial burden and displacement. An example requirement for financial products for rental properties could be to include protection against rent increases.

Climate Risk Staff

The NCUA should hire for a climate risk officer position to monitor climate risks and opportunities for FICUs and their members and to lead on climate risk management practices.[101] The climate risk officer should engage with other NCUA staff on needed research, resources, and future climate-related guidance for FICUs. This position should be hired in recognition of the need to educate FICUs on climate-related physical and transition risks as well as climate resilience and greenhouse gas and pollution reduction project opportunities for credit unions. The NCUA should hire additional full-time staff to report to the climate risk officer, preferably staff with climate science or climate modeling, green or clean energy financing, and climate risk management expertise.

The climate risk team should be tasked with, amongst other things, engaging with the Network for Greening the Financial System (NGFS) and other international best practices developments. These systems could benefit from NCUA's unique input as a regulator of the smallest institutions that nonetheless support diverse communities across the United States. The NCUA would benefit from data collection, modeling, and climate scenario development underway by NGFS and its membership of financial regulators around the world.

NCUA's FSOC Membership Role

As a voting member of the Financial Stability Oversight Council (FSOC) the NCUA should utilize this role to advocate on the need for mitigation of climate-related risks. Credit unions are bearing the burden of climate change, but most have a limited role in contribution to it compared to larger financial institutions directly investing in corporate or project finance in high carbon industries. These larger institutions are supervised by other FSOC members.

Additionally, the NCUA should request that the U.S. Department of the Treasury's Office of Financial Research (OFR) expand access soon to the Climate Data and Analytics Hub beyond

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[101] Elizabeth Langel and Sarah Sliva, "Financial services focus: The emerging role of the climate risk officer," *Heidrick & Struggles*. accessed June 26, 2023. https://www.heidrick.com/en/insights/financial-services/financial-services-focus-the-emerging-role-of-the-climate-risk-officer; "Fifth Third Appoints Michele Mullins Climate Risk Officer; Role Reflects Bank's Commitment to Managing Climate Change Risk," *Fifth Third Bank*, September 24, 2021. https://www.53.com/content/fifth-third/en/media-center/press-releases/2021/press-release-2021-09-24.html; "OCC Announces Chief Climate Risk Officer," *OCC*, September 12, 2022. https://www.occ.gov/news-issuances/news-releases/2022/nr-occ-2022-110.html#:~:text=Yue%20(Nina)%20Chen%20as%20Chief,Acting%20Comptroller%20of%20the%20Currency.

staff of the OFR, the Federal Reserve, and the Federal Reserve Bank of New York to which the pilot is currently limited. The pilot was launched in July 2022 with a goal to provide FSOC member agencies with access to public climate and financial data, high-performance computing tools, and analytical and visualization software.[102] Once access is expanded to the full suite of FSOC members, the NCUA could take advantage of the hub to inform assessments of credit union system vulnerabilities and needs, and share data collected from credit unions with the hub.

Data Gathering (Q36-Q37)

Climate and Environmental Data

Responses to this request for information will provide some relevant data, but the NCUA should additionally send out mandatory surveys to FICUs to assess more broadly how credit unions are already considering climate-related financial risks. The NCUA should also collect data from credit unions that are currently tracking their climate and environmental impacts, and encourage large credit unions with significant climate and environmental impacts to begin this type of tracking and reporting. Data gathering, sharing, and reporting are necessary.

Use and Support of Existing Federal Data Collection

The NCUA should urge the U.S. Department of the Treasury Federal Insurance Office to move forward quickly with its climate data call[103] for information from certain property and casualty insurers regarding their current and historical underwriting data on homeowners' insurance, and use the resultant data to analyze risks to the credit union system. FIO's assessment of climate-related exposures and their effects on insurance availability for policyholders, including whether climate change may create the potential for any major disruptions of private insurance coverage in regions of the country particularly vulnerable to climate change impacts, will have profound implications for credit unions and NCUA's interventions.

Given the greater capacity at the Federal Reserve Board and within the Federal Reserve System, the NCUA should work with the Fed, particularly the Federal Reserve Banks, more closely on climate-related financial risks. Regional banks are collecting data, researching, and analyzing risks, which may include risks prominent to their geographic areas, and credit unions within those regions likely face similar risks and could learn from larger institutions' analysis. For example, the Federal Reserve Bank of San Francisco is working to understand climate risk and

[102] "Office of Financial Research Pilots Cutting-Edge Data Hub to Assist with Climate-Risk Assessments," *U.S. Department of the Treasury*, July 28, 2022, https://home.treasury.gov/news/press-releases/jy0895.; Office of Financial Research, "Office of Financial Research Pilots Cutting-Edge Data Hub to Assist with Climate-Risk Assessments," *Office of Financial Research*, July 28, 2022, https://www.financialresearch.gov/press-releases/2022/07/28/office-of-financial-research-pilots-cutting-edge-data-hub-to-assist-with-climate-risk-assessments/.

[103] "Agency Information Collection Activities; Proposed Collection; Comment Request; Federal Insurance Office Climate-Related Financial Risk Data Collection," *Federal Register*, October 21, 2022. https://www.federalregister.gov/documents/2022/10/21/2022-22880/agency-information-collection-activities-proposed-collection-comment-request-federal-insurance

resilience implications on the economy and financial and payment systems while taking stock of its own climate impacts by focusing on research (including how businesses are responding to climate risk in its 9-state Western region[104]), banking supervision, community, and operations.[105]

The NCUA should also provide financial and technical support to FICUs in the transition to collecting additional small-business lending data required by the final rule from the CFPB implementing Section 1071 of the Dodd-Frank Act, which was finalized on March 30, 2023.[106] This data will be critical to identify and remedy bluelining strategies whereby lenders avoid serving or withdraw from underserved communities and communities of color due to perceived climate risk, rather than helping those communities build climate resilience.

Conclusion

The April 2023 economic research on climate-related financial risks produced by NCUA's staff in the Office of the Chief Economist[107] was an excellent start to examining the climate-related financial risks that credit unions face, especially because the researchers looked at geographic distribution of risk and shed light on concentrated risks to MDIs and low-income designated credit unions. We encourage the NCUA to continue researching these topics on its own and in coordination with other agencies within FSOC.

The NCUA is not the first financial agency to begin addressing climate-related financial risk, and it should learn from and collaborate with federal banking regulators on their proposed climate guidance,[108] which should be finalized in 2023. Given that FICUs are entities structured quite differently from the large institutions that the Fed, FDIC, and OCC are prioritizing in their initial guidance, the NCUA should also seek ideas from the New York State Department of Financial

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[104] Hishgee Jargalsaikhan, Luiz E Oliveira, and Sylvain Leduc, "How Are Businesses Responding to Climate Risk?," *Federal Reserve Bank of San Francisco*, March 21, 2022, https://www.frbsf.org/economic-research/publications/economic-letter/2022/march/how-are-businesses-responding-to-climate-risk/.

[105] "Why Climate Risk Matters to Us," *Federal Reserve Bank of San Francisco*, June 21, 2021, https://www.frbsf.org/our-district/about/climate-risk/.

[106] "Small business lending rulemaking," *Consumer Financial Protection Bureau*, March 30, 2023. https://www.consumerfinance.gov/1071-rule/

[107] "Estimating Credit Union Exposure to Climate-Related Physical Risks," *NCUA*, April 19, 2023. https://ncua.gov/news/publication-search/climate-financial-risk/estimating-credit-union-exposure-climate-related-physical-risks

[108] "Risk Management: Principles for Climate-Related Financial Risk Management for Large Banks; Request for Feedback," *OCC*. December 16, 2021. https://www.occ.gov/news-issuances/bulletins/2021/bulletin-2021-62.html; "Request for Comment on Statement of Principles for Climate-Related Financial Risk Management for Large Financial Institutions," *FDIC*, March 30, 2022. https://www.fdic.gov/news/financial-institution-letters/2022/fil22013.html; Federal Reserve Board, "Principles for Climate-Related Financial Risk Management for Large Financial Institutions," December 8, 2022. https://www.federalreserve.gov/newsevents/pressreleases/other20221202b.htm

Services on its climate guidance, which began to consider what climate guidance could look like for smaller institutions.[109]

It is critical that the NCUA align efforts related to assuring benefits and access to capital to climate vulnerable communities with other key federal initiatives. These include the White House Council on Environmental Quality and their oversight of the Justice40 Initiative, which aims to invest 40 percent of certain federal infrastructure dollars into disadvantaged communities,[110] as well as the Environmental Protection Agency's implementation of various Inflation Reduction Act programs, most notably the Greenhouse Gas Reduction Fund,[111] and the Department of Energy's implementation of the Energy Infrastructure Reinvestment Program.[112] Aligning climate-related financial risk efforts with the above mentioned programs will facilitate smoother financing of critical resilience and mitigation projects, protect consumers, and improve the prospects of financial firms' ongoing safety and soundness and financial stability. NCUA staff should closely follow the implementation of these new climate initiatives and offer insight and expertise related to how credit unions can be aligned and supportive.

We thank the NCUA for issuing this request for information, and urge that this be considered the first step of many in addressing climate-related financial risks to credit unions and their members. For further discussion, please contact Jessica Garcia at jessica@ourfinancialsecurity.org.

Sincerely,
Americans for Financial Reform Education Fund
Americans for Financial Reform Education Fund (AFREF) is a nonprofit organization which fights to eliminate inequity and systemic racism in the financial system in service of a just and sustainable economy. Formed in the wake of the 2008 crisis, we are working to lay the foundation for a strong, stable, and ethical financial system – one that serves the economy and the nation as a whole. AFREF works in coalitions alongside groups centering environmental justice, civil rights, consumer, labor, business, investors, and more.

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[109] "Proposed Guidance for New York State Regulated Banking and Mortgage Institutions Relating to Management of Material Financial Risks from Climate Change," *New York State Department of Financial Services*, December 2022.
https://www.dfs.ny.gov/system/files/documents/2022/12/dfs_proposed_guidance_banking_mortgage_climate_change_202212.pdf
[110] "Justice40 A Whole-Of-Government Initiative." *The White House.*
https://www.whitehouse.gov/environmentaljustice/justice40/
[111] "Greenhouse Gas Reduction Fund." *Environmental Protection Agency.*
https://www.epa.gov/inflation-reduction-act/greenhouse-gas-reduction-fund
[112] "Energy Infrastructure Reinvestment Program." *Department of Energy Loans Program Office.*
https://www.energy.gov/lpo/energy-infrastructure-reinvestment

Additionally endorsed by:

The Greenlining Institute

Founded in 1993, Greenlining is committed to building a just economy that is inclusive, cooperative, sustainable, participatory, fair, and healthy. We work towards a future where communities of color can build wealth, live in healthy places filled with economic opportunity, and are ready to meet the challenges posed by climate change. Greenlining's climate finance team holds private entities, with an emphasis on financial institutions, accountable for their impacts on climate and the economy. We work to ensure low-income communities and communities of color across California and the country will be better equipped to face the impacts of climate change in a way that promotes self-determination and economic opportunity.
www.greenlining.org

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Public Citizen is a national, non-partisan organization with more than 500,000 members and supporters. We hold the government and corporations accountable to the public interest with campaigns and advocacy in legislatures, courts, and administrative agencies. At the intersection of financial regulation and the climate crisis, we advocate for policies that mitigate climate-related financial risk while promoting rather than impeding racial, economic, and intergenerational justice.