

March 31, 2023

Michela Barba
Co-Lead, Natural Disaster Risk Working Group
Federal Housing Finance Agency
400 7th Street, SW
Washington, D.C. 20219
Via FHFA [Provide Input Page](#)

Re: FHLBank System at 100: Focusing on the Future (2023) – [Climate Resiliency: Preparedness and Response, and Risk Management Considerations](#)

Dear Ms. Barba,

It is a pleasure to submit comments on behalf of [Ceres](#) and the [Ceres Accelerator](#) for Sustainable Capital Markets. Ceres is a nonprofit organization with over 30 years of experience working on climate change with the world's leading investors and companies to drive sustainability in the bottom line and through ambitious federal and state climate and clean energy policy. The Ceres Accelerator works to transform the practices and policies that govern capital markets in order to reduce the worst financial impacts of the climate crisis. It spurs capital market influencers to act on climate change as a systemic financial risk, driving the large-scale behavior and systems change needed to achieve a just and sustainable future and a net zero emissions economy.

Ceres works with leading global investors and companies. Our Investor Network is currently over 220 investors that collectively manage over \$60 trillion in assets. Ceres is a founding partner of the [Net Zero Asset Managers Initiative](#) and the [Paris Aligned Investor Initiative](#), which includes investors focused on sustainable investments within their portfolios and other assets. Our Company Network includes approximately 60 of the largest global companies and banks with whom we work on an in-depth basis on climate strategy and disclosure, among other issues.

We thank the Federal Housing Finance Agency (FHFA) for convening the FHLBank roundtables. In particular, we appreciate the Climate Resiliency: Preparedness and Response, and Risk Management Considerations session held in Wilmington, North Carolina on March 6 at which the Managing Director for the Ceres Accelerator, Steven Rothstein, was able to participate.

I. INTRODUCTION

Ceres regularly engages with the FHFA, and previously submitted comments in response to the agency's [Climate and Natural Disaster Risk Management RFI](#) and [2022-2026 Strategic Plan](#). In 2020, we published the report [Addressing Climate as a Systemic Risk: A Call to Action for U.S.](#)

[Regulators](#), which recommends practical actions FHFA can take to address climate risks. In June 2022, we published our second annual [Climate Risk Scorecard](#) for nine federal financial regulators, including the FHFA. The Scorecard assesses regulator actions to protect our capital markets, financial institutions, and communities from climate-related financial risk. We then hosted a [webinar](#) on the 2022 Scorecard, in which Daniel Coates, Chair of FHFA’s Climate Change and ESG Steering Committee, participated. In February 2023, we published a [paper](#) with the Mortgage Bankers Association on *Housing Finance and Climate Risk*.

Financial institutions are exposed to various climate-related financial risks, and the FHLBanks are no exception. Climate risk – which represents the potential financial losses associated with physical and transition risks resulting from climate change – pose significant financial risks to the nation’s housing and mortgage markets. Both physical and transition risk can result in significant financial losses for FHLBanks and their members and jeopardize affordable housing goals. In 2022 alone, [3.4 million people](#) lost their homes temporarily or permanently due to climate events such as fires, floods, and droughts.

Physical risks include direct losses from weather-related events (including floods, droughts, and extreme temperatures and storms), as well as indirect losses from the effects of climate change on assets, businesses, and industries. FHLBanks are exposed to these risks through their [mortgage](#) loan portfolios, investments in securities backed by mortgages on properties in areas prone to extreme weather events, and real estate holdings. For example, rising sea levels may result in higher foreclosure rates due to homes being submerged or uninhabitable; increasing storm frequency such as hurricanes can level coastal communities; flooding from storms, sea-level rise, and changes in precipitation and snow melt threaten floodplain communities; and wildfires that now occur nearly year-round destroy entire communities in western states. Furthermore, since many FHLBank members operate in limited geographic areas, their portfolios can be highly exposed to extreme weather events, resulting in higher credit and liquidity risks.

Transition risks are the economic and financial risks associated with the transition to a low-carbon economy, including regulatory, technological, market, and consumer shifts. The FHLBanks may be exposed to these risks as the transition disrupts established markets and requires adaptation of business models in order to remain competitive. The same communities that are most vulnerable to physical climate risks also experience increased rates of mortgage default, depreciation in property values, and insurance pullouts. Furthermore, there is potential for losses from regulatory changes such as carbon taxes or shifts in consumer preferences away from certain products or services.

The FHLBanks’ [mission](#) is to provide their member banks with a reliable source of funding for housing finance, community lending, and asset-liability management as well as liquidity for members’ short-term needs. In practice, this includes protecting their members from financial risks such as credit and liquidity risk. In order to mitigate the risks associated with increasingly frequent

and severe climate events, that mission must now contemplate and incorporate measuring and managing climate risks to the housing finance system.

II. RESPONSE TO ROUNDTABLE DISCUSSION QUESTIONS

The FHLBank Act provides the FHLBank System with the authority to establish and implement various programs to achieve its mission, including programs related to funding and liquidity, affordable housing, community investments, and economic development. 12 U.S.C §§ 1421-1449. Likewise, FHFA regulations provide the FHLBank System with the authority to establish and implement affordable housing programs to support the housing needs of low- and moderate-income (LMI) communities. 12 C.F.R. Part 1291. These authorities allow each FHLBank to pursue initiatives that are related to its mission, such as implementing climate resiliency measures within each bank’s area of operation.

Further, the Federal Home Loan Banks (FHLBanks) are part of FHFA’s [Climate Change and ESG Steering Committee](#), which was created to ensure that the FHFA, including the FHLBank System, accounts for the risks associated with climate change and natural disasters. This includes participating in the agency-wide [Disaster Response Team](#) (DRT), which coordinates with FHFA regulated entities, other government agencies, external parties, and internal FHFA stakeholders to support borrowers and renters affected by natural disasters. This framework incorporates forbearance and workout options for borrowers in areas impacted by natural disasters, tailoring options to their specific circumstances.

It is essential that the FHLBank System take steps to mitigate climate risks by providing FHLBanks and FHLBank members access to capital, technical assistance, and education on best practices for managing climate-related risk. The FHLBanks should conduct research on emerging trends related to climate risk and develop strategies for mitigating these risks, with a particular focus on vulnerable communities and the goal of incorporating climate risk into their risk management frameworks. The FHFA should assist the FHLBank System by issuing climate risk management guidance, assisting with data collection, running climate scenario analysis exercises, promoting climate-resilient products, and providing educational programs to FHLBanks, member banks, and their consumers. By taking these steps, FHLBank System can better understand its exposure to climate-related risks and take appropriate steps to limit or avoid them, while taking advantage of financial opportunities along the way.

A. Sustainable, Affordable, and Resilient Housing in the FHLBank System

Affordable housing is one of the primary drivers behind the creation of the FHLBank System. Today’s housing system faces an increasing affordability crisis. Housing’s exposure to climate-related risks compounds that crisis. The FHLBank System plays a critical role in climate resiliency and preparedness, ensuring that climate risk management doesn’t lead to disinvestment or climate redlining (also known as bluelining). Climate resilient housing refers to homes that are designed, built, and/or retrofitted to withstand the impacts of climate events such as flooding and high winds.

By investing in climate resilient housing, homeowners can save money on their energy bills and reduce their vulnerability to weather- and climate-related disasters.

1. Climate resilient housing

The FHLBank System should incorporate climate resiliency into the FHLBank's Duty to Serve requirements and annual housing goals, promote new development of and investment in affordable housing options in safer geographic areas that are less prone to climate events, and encourage FHLBanks to consider pilot programs to help borrowers build resiliency for existing buildings.

The FHLBank System can help create and support a strong supply of safe, sustainable affordable housing by providing funds for construction and rehabilitation projects; energy efficiency upgrades; homeownership counseling; rental assistance; job training; foreclosure prevention counseling; and loan modifications. The FHLBanks should also support their local communities as they adapt to climate change. For example, FHLBanks could provide grants and loans to community-based organizations for projects that promote community resilience to extreme climate events. Similarly, FHLBanks could develop resilience programs that provide grants and education to local organizations working on initiatives related to coastal resilience, disaster preparedness, and flood mitigation.

FHLBank members can help provide climate resilient housing for existing buildings by providing financing and other resources needed for rehabilitation, retrofitting, and repairs. This includes funds for weatherproofing materials such as windows, storm shutters, flood barriers, doors, roofs, siding, and insulation; providing grants or loans for energy efficient appliances; and providing technical assistance to guide borrowers through the retrofitting process. The FHLBanks can also offer tax credits, rebates, or reduced interest rates that make it easier for homeowners to access affordable credit for these projects.

For new construction projects, FHLBank members can provide financing and other resources needed to ensure that new homes are built with resilience in mind. This includes providing funds for building materials that are designed to withstand extreme weather events such as high winds and flooding; providing tax credits or rebates for builders who use resilient building materials; and providing technical assistance on incorporating resilience into the design of buildings. The FHLBanks can also work with local governments to create zoning policies that promote resilience in new construction projects, such as regulations that require builders to use certain building materials or incorporate specific features into their designs.

Further, the FHLBank System can help its member banks support the development of climate resilient housing by offering incentives for investment in these types of projects. This could include providing access to low-cost capital for housing projects and offering grants to local governments to support community development initiatives. FHLBanks could also provide access to risk management tools and guidance to help member banks assess their exposure to climate-related risks and develop risk management plans that incorporate climate considerations.

2. Assessing climate risk of the FHLBank System and its members

The FHFA should assist the FHLBanks begin to manage climate risk in their portfolios by providing guidance and recommendations on how to initiate risk assessment (i.e. which assets and products could be impacted, what resources are available) and what data FHLBanks should disclose on their investments (i.e. where loans and grants are made, demographic information of the communities being served). The FHLBanks should conduct a loan-level analysis of potential risk exposures to various natural disasters and climate change, investing in high-quality, asset-level data on all sources of climate risk, including floods, droughts, wildfires, precipitation, storms, and sea-level rise.

The FHLBank System can acquire data from various sources to gain an understanding of potential climate vulnerabilities in the housing and mortgage markets, including public data sets from federal agencies such as the National Oceanic and Atmospheric Administration (NOAA), U.S. Geological Survey (USGS), Department of Housing and Urban Development (HUD), Federal Emergency Management Agency (FEMA), and Environmental Protection Agency (EPA). The FHLBank System can also access private data from real estate companies, lenders, and other financial institutions.

Several methodologies also exist for targeting communities that are most vulnerable to climate change. The Environmental Protection Agency (EPA), the White House Council on Environmental Quality (CEQ), and NOAA each have their own interactive environmental justice tool: the Environmental Justice Screening and Mapping Tool (EJScreen), Climate and Economic Justice Screening Tool (beta version), and Climate and Economic Justice Screening Tool (CEJST), respectively. Additionally, the Centers for Disease Control and Prevention (CDC) maintains a Social Vulnerability Index that is used to assess a community's capacity to prepare for, respond to, and recover from human and natural disasters, and several databases on social vulnerability, financial risk, and geographic hazards exist such as FEMA's flood maps and National Risk Index (NRI) datasets, NASA's Disasters Data Pathfinder, and First Street Foundation data and models.

To further assist FHLBank members, the FHFA should issue an RFI on available data, models, and other information that could be used, in addition to existing data, to inform the FHFA and FHLBanks System on climate-related risks to the housing finance system, including data on the adverse effects of climate events on LMI and BIPOC (black, indigenous, and people of color) communities.

Once the data is acquired by the FHLBank System, it can be analyzed to identify climate risks that could affect the housing and mortgage markets in different regions across the country. For example, data on historical weather patterns can be used to identify areas that are prone to extreme weather events such as floods or hurricanes, and data on sea level rise can be used to identify coastal areas that are particularly vulnerable to flooding and water damage. Additionally, analysis of data on housing prices can be used to predict how changes in climate may affect home values over time. The FHFA should then conduct climate scenario analysis exercises to assess the safety

and soundness of the FHLBanks, and evaluate how different climate scenarios (including cascading and compounding risks¹) could affect their investments and strategies for mitigating those risks.

Depending on the results of these exercises, the FHFA should consider increasing capital requirements to help address identified risks. Similarly, the FHFA and FHLBank System should encourage FHLBank disclosure of climate risks to physical assets to ensure investors have the necessary data for decision-making and to help homeowners deal with climate risks, while ensuring disclosure policies do not lead to inequitable outcomes. Because the FHLBanks are SEC registrants, the FHLBank System should work with and leverage the expertise of the SEC.²

B. Disaster Recovery Efforts in the FHLBank System

In order to help homeowners with disaster recovery, it is imperative that FHLBanks maintain operability during and in the immediate aftermath of a climate disaster. This could include disaster-related payment deferral programs, waived late fees, forbearance of mortgage payments, and suspension of negative credit reporting to help recover from losses. The FHLBank System should also consider creating programs such as Fannie Mae's [Disaster Response & Rebuild](#) group, which assists with housing rebuild strategies and investments and travels to impacted areas to help ensure lenders, homeowners, renters, property owners, and community organizations can better access mortgage relief options after a natural disaster. Freddie Mac has similar disaster relief [programs](#), and has published [research](#) on climate resiliency incentives.

The FHLBanks can also provide access to liquidity and credit for borrowers affected by disasters, including through Community Investment Cash Advance (CICA) programs, allowing them to meet their financial obligations and rebuild their businesses and communities. This may include offering lower interest rates on loans, offering loan guarantees to borrowers with limited credit histories, or providing grants or other forms of assistance to those who are unable to obtain traditional financing.

C. Support in Areas Vulnerable to Climate-Related Disasters

As discussed above, the FHLBanks can also provide services to climate-vulnerable areas, which are disproportionately LMI and BIPOC communities. Providing no- or low-interest loans, microfinancing, grantmaking, or investing in community development projects can play a critical

¹ Feedback effects could have a significant adverse impact on the housing finance market. As climate events increase in frequency and intensity, disasters may happen concurrently or consecutively, and it will be more difficult to recover from the impacts. Borrowers may find it difficult to meet their loan obligations due to lost or damaged property and higher input for necessary mitigation or recovery efforts.

² While we acknowledge that the FHLBanks and their members may be required to make such disclosures under the SEC's [proposed climate-related disclosure rule](#), the recommendations made in this comment are distinct from and/or in parallel to the final SEC rule. In the interim, we encourage the FHLBanks and their members to prepare for these filings, including by preparing [TCFD reports](#).

role in helping communities remediate past harms and build both physical and financial resilience to climate events, including:

- Projects addressing flooding or sewer issues, or reducing stormwater runoffs such as new or rehabilitated sewer lines, levees, and storm drains
- Flood resilience activities for affordable housing, such as building elevation and relocation and installation of sump pumps
- Climate- and disaster-resilient and energy-efficient multi-family affordable housing
- Community facilities, including solar panels, geothermal heat pumps, battery storage, improving building envelope insulation, and lighting, window, and appliance upgrades
- Community solar projects that provide energy to an affordable housing project
- Microgrid or battery storage projects in areas with high flood and/or wind risk, reducing risks of power loss due to flooding and high winds
- Flexible loans and repayment options to help borrowers withstand weather- and climate-driven economic disruptions

Additionally, the FHLBanks can provide technical assistance and expertise to communities affected by climate-related disasters on how best to prepare for natural disasters and climate-related events and how to use FHLBank System grants and loans to create resilient housing. Financial literacy initiatives will help increase consumer awareness about different types of climate resiliency measures, available financial products, and associated risks and benefits. This will help ensure that individuals are able to make informed decisions about which products best suit their needs while also helping them understand their options when it comes to investing in green projects.

D. Populations, Market Segments, or Purposes Unique to the FHLBanks

Climate risks [exacerbate](#) existing financial and environmental inequities that LMI and BIPOC communities already face, and these same communities are often excluded from future transition-related solutions and opportunities. Vulnerable communities are also [more likely to live](#) in areas disproportionately impacted by climate change, and “are [less likely to have the resources](#) to protect and guard against” the impacts of climate events, creating an [additional layer of financial burden](#).

As climate-related disasters worsen, FHLBanks may be an important source of support for vulnerable communities. First, they can provide grants and loans to communities affected by climate-related disasters. The FHLBanks’ Affordable Housing Program (AHP) could provide grants and low-interest loans to help finance affordable housing projects in communities that have

been affected by natural disasters or other environmental events. The use of the AHP should also be expanded to finance the construction, purchase, or rehabilitation of housing in less exposed areas to use as affordable housing. Additionally, the FHLBanks' Community Investment Program (CIP) provides grants and loans for community development projects that help improve infrastructure and services in economically distressed communities, and could be used to implement climate resiliency retrofits.

FHLBanks should consider products and policies that support improvements for individual homeowners or developers (e.g. elevating homes, improving insulation, renewable energy, and energy efficiency retrofits). Likewise, FHLBank members should work *with* communities in these vulnerable areas, both in initiating a project and throughout its duration, to ensure genuine input from and benefit to the impacted community. Engaging with local stakeholders can help ensure that proposed investments are appropriate for the local context and will provide adequate resources for successful implementation. Furthermore, consulting with a range of stakeholders beforehand can ensure that proposed investments are sustainable and do not cause further disruption or displacement in vulnerable communities where existing infrastructure may be inadequate or ill-suited for new developments.

Second, the FHFA should establish an equity redistribution and investment fund to provide financial resources to homeowners willing to relocate away from areas that are highly exposed to climate risks. [Managed retreat](#) has several benefits for areas affected by climate change. By relocating people, businesses, and infrastructure out of harm's way, it can reduce the economic losses associated with climate disasters. It can also protect ecosystems by restoring wetlands and other natural areas that are often damaged by development while helping reduce long-term costs associated with rebuilding infrastructure that is destroyed by extreme weather events.

However, FHLBanks must work with the impacted communities, and provide funding for voluntary relocation programs and buyouts for homeowners in at-risk areas. It should also provide grants for communities to develop comprehensive plans for managed retreat strategies and offer tax credits or loan forgiveness programs to encourage homeowners to move out of vulnerable areas. Moreover, the FHLBank System should incentivize its banks and their members to invest in infrastructure projects that help reduce climate-related risks, and provide access to the resources necessary to preserve and enhance the resilience of vulnerable communities. These resources, as well as their costs and benefits, must be fairly distributed to ensure that LMI and BIPOC communities do not disproportionately bear the burdens, including the [ongoing financial aftermath](#) of these events.

Third, the FHLBank System should evaluate whether any policies are creating barriers to obtaining financing for climate risk mitigation or improvements. This risk should be spread across portfolios rather than trying to price it into specific loans to avoid disproportionate burdens on vulnerable communities. Likewise, the FHFA should prohibit the relaxation of consumer protections for climate risk mitigation products and proactively prevent abusive products and practices. Instead,

consumer protections should be enhanced and policies adopted that limit risk to the FHLBanks while protecting homeowners from lenders who use abusive tactics and leave families in precarious situations that put them at risk of losing their homes. Similarly, inflation of property valuations based on estimated cost savings from energy efficiency improvements should be prevented.

Finally, FHFA should consider the policy implications of climate risk assessments and regulations on vulnerable communities. The FHFA must understand who is adversely impacted and who benefits from proposed policy changes, especially regarding LMI communities, BIPOC communities, indigenous communities, and other historically disadvantaged groups and regions. Likewise, the FHFA must ensure that the FHLBanks are transparent in their risk management processes so that communities can understand the impacts of climate-related financial risks on their financial services. To this end, the agency should provide recommendations or guidance to the FHLBanks that focuses on assessing the impact to vulnerable and underserved communities; resilience and adaptation standards; race and income disparities (bluelining, affordable housing shortages); renter impact (multi-family markets), steps to limit harms to housing affordability and inequitable losses in wealth, and climate-related risk disclosure.

E. Addressing Insurance Challenges in Climate-Vulnerable Areas

There are several ways to address insurance challenges in climate-vulnerable areas in the FHLBank System. Ceres recently published a [report](#) with the Wharton Risk Center on inclusive insurance, highlighting challenges in the insurance industry for low-wealth families. The report identifies 14 recommendations for federal and state governments and the insurance sector. These practical recommendations are worth considering for the FHFA and FHLBank System, and several key recommendations are highlighted below.

First, the FHFA should focus on policy solutions, including [subsidizing](#) disaster insurance for LMI households. The FHFA and FHLBank System should also support research on potential direct and indirect discrimination in disaster insurance markets to study the correlation between physical risk and social vulnerabilities as well as the efficacy of regulatory approaches generally aimed at reducing or eliminating discrimination based on protected factors in insurance pricing. Additionally, the FHLBanks can support initiatives and organizations that promote greater consumer understanding of climate risk and effective risk management practices for climate-vulnerable households. This could include training on how to read insurance policies, strategies for reducing risk through mitigation measures such as strengthening homes against wind damage or installing flood barriers, or developing comprehensive emergency preparedness plans ahead of a disaster event.

Second, FHFA could develop regulations for inclusive insurance models and establish a regulatory framework and/or grants to help spur adoption of potentially beneficial insurance designs that are new to markets and involve novel partnerships, such as [microinsurance](#) or [parametric insurance](#). Claims contestation procedures should also be reformed, making consumer claim advocacy

resources publicly available to help level the playing field for vulnerable and under-resourced households. Similarly, the FHFA should establish contract complexity and baseline coverage standards to increase transparency and consumer knowledge of what their policies actually cover. The FHFA should also encourage data disclosures from insurers for research, [incorporating](#) climate risk into the rules for mortgage insurance and guarantee fees, and mandating disaster coverage be backed by reinsurance to reduce federal taxpayer exposure.

Third, the FHFA should work with Congress and FEMA to increase access to affordable flood insurance in the next NFIP reauthorization bill, including resources for LMI households to reduce flood risk. The FHFA should likewise work with Congress to create a [Community Reinvestment Act for insurance](#) that would provide protection from the economic shocks of climate events and address availability, affordability, differential impact, risk communication, and activities to improve insurance literacy.

F. Addressing the FHLBank System’s Own exposure to Climate Risks

The FHLBank System itself may be exposed to physical and transition risks from geographic and loan portfolio concentrations and should address these risks in order to protect its members, their investments, and the communities they serve. The FHFA should require the FHLBanks to measure, monitor, and mitigate the climate risks relevant to their region and members. The first step in managing any financial risk is to identify and measure that risk:

- **Identify climate risks:** Begin by identifying the physical and transition risks that are of particular relevance to each FHLBank and its stakeholders, such as exposure of commercial and residential mortgage holdings, as well as elements of loan processing (e.g. appraisal, underwriting, products, and asset management/servicing).
- **Assess current risk exposure:** Once climate risks have been identified, assess how each FHLBank is currently exposed to those risks. Risks should not be assessed in silos. Consider factors such as the geographic scope and concentration of assets and loans; financial products offered; and utilization of climate resiliency measures.
- **Analyze historical and forecasted data:** Analyze both historical and forecasted climate data for the areas in which each FHLBank operates. This data should consider, for example, average temperatures and precipitation levels, extreme weather patterns, property characteristics, catastrophe risk models, reconstruction cost data, and insurance information (identifying potential gaps in coverage and concentration risk).
- **Review past performance:** Review past performance in areas related to climate events. Evaluate how each FHLBank responded to these shocks or disruptions to identify strengths and weaknesses in its risk management capabilities.

- Engage stakeholders: Engage stakeholders in efforts to identify and address climate risk exposure. This includes FHLBank members and their customers as well as other organizations such as environmental and housing advocacy groups who may have information that could be beneficial in developing an effective risk management strategy. Include questions about specific weather- and/or climate-related events that have impacted their businesses, as well as any changes they have implemented to account for these impacts. By engaging with stakeholders early on in the process, the FHLBanks can ensure that all parties are aware of potential risks and can work together to develop strategies that are mutually beneficial.
- Identify possible scenarios: Identify likely future scenarios that might affect each FHLBank’s operations and run climate scenario analysis exercises. Examples could include a prolonged heatwave leading to higher energy costs or extensive building damage due to an unusually severe storm season.
- Estimate potential losses: Estimate potential losses associated with each scenario in terms of both financial losses and non-financial losses (e.g. property damage, reputational damage).
- Review current policies: Review current FHLBank policies and procedures related to climate risk management, including consultation with insurance providers, member banks, customers, and members’ and customers’ understanding of their climate risks.
- Develop recommendations: Create actionable recommendations based on the assessment of potential losses associated with different climate-related scenarios. These should include issuing guidance and changes to existing policies or procedures as well as investments in new products or incentives that could help mitigate climate risk. Implement processes for continuing monitoring and analyzing risks and opportunities to inform supervision. Consider implementing capital consequences to account for these risks, as well as opportunities to offset or counteract impacts of increased capital buffers or requirements.

Ultimately, the FHFA should publish climate risk guidelines to assist the FHLBank System in measuring and managing its climate risks. This guidance would follow the RFI issued by the FHFA in 2021 on Climate and Natural Disaster Risk Management at the Regulated Entities, and would align with the Financial Stability Oversight Council (FSOC) [recommendations](#) and Principles for Climate-Related Financial Risk published individually by the Federal Reserve ([Fed](#)), Office of the Comptroller of the Currency ([OCC](#)), and Federal Deposit Insurance Corporation ([FDIC](#)). FHFA guidance should outline standards and recommended data collection (including issuing a call for data from relevant U.S. federal agencies), disclosure categories (such as physical, transition, and socioeconomic risk to various portfolios, assets, and geographies), and risk management strategies including:

- Portfolio diversification: reducing exposure risks to any one particular asset class that may be impacted by climate-related losses.
- Asset optimization: assessing the overall risk-return profile of an FHLBank's assets by analyzing climate-related agricultural losses.
- Financial products: reducing risks posed by physical, transition, socioeconomic risks while helping promote sustainable development, such as investments in green bonds where proceeds go towards projects that have positive environmental benefits such as renewable energy projects or clean water initiatives.
- Derivatives: hedging exposure by [transferring risk](#) to another party, such as insurance companies, protecting the FHLBanks against potential loss without having to invest or disinvest in any particular asset or area.
- Financial incentives: providing financial incentives such as discounted rates to member banks that incentivize borrowers through assistance programs, subsidies, special loan programs, or lower interest to adopt climate-resilient housing practices or technologies that could help protect against losses, and therefore risk of default, from climate events.
- Assistance programs: providing loan deferral or repayment assistance programs, waived late fees, mortgage forbearance, and suspension of negative credit reporting to help recovery after climate events could help decrease the risk of default.
- Insurance: increasing availability and type of insurance products to help member banks and underlying borrower recoup costs and ensure payment on the loan, such as weather derivatives and [parametric insurance](#).
- Education: supporting education and outreach activities to help borrowers better understand climate risks and how they can access resources to reduce those risks; housing counselors should also receive training to ensure they can adequately educate borrowers.

Further, the FHFA should consider introducing new governance guidelines to ensure that the FHLBanks have adequate oversight of climate-related risk assessment and disclosures. This could include the establishment of a climate-related risk committee responsible for monitoring and managing climate-related risks, and ensuring bank boards and senior management have access to accurate information about the impact of climate-related risks on each region's operations. In particular, FHFA should provide guidance on how the FHLBanks can assess the adequacy and effectiveness of their and their member's governance and risk management policies and procedures for addressing climate-related risks, as well as whether each bank has adequate expertise and resources for managing these risks, including climate risk officers that can lead on education and risk management practices. Likewise, the FHFA should begin the process to update its Examination Manual to include climate risk considerations.

After determining the climate risks it is exposed to, the FHLBanks should incorporate risk mitigation strategies that address those risks, such as those described above, into their transition and capital plans. Climate risk mitigation strategies will help ensure that the FHLBank System is adequately capitalized and has adequate loss absorbing capacity in the face of climate-related losses. Additionally, the FHLBanks and their member banks should adapt internal operations to address their own physical risks so that employees can fulfill their duties post-climate event, including through disaster preparedness plans, remote work during/after disasters, generator back-up in a disaster-safe location, and training members to help customers apply for and understand relief options.

Importantly, any FHFA climate risk guidance and practices implemented by the FHLBank System should promote affordable housing goals and take into account fair lending concerns while discouraging disinvestment and not exacerbating financial burdens on LMI communities, BIPOC communities, and other climate-vulnerable communities. Mitigation measures should be developed with involvement from these communities so as to promote wealth building opportunities and ensure accessibility, affordability, and affirmative initiatives that promote their participation in the housing market.

G. Programs and Products to Support Sustainable and Resilient Communities

The FHLBanks and their members should utilize their programs and products to increase climate resiliency in their housing markets. As discussed above, the FHFA should expand the purpose and encourage the use of the AHP to include investments in climate resiliency, community land trusts, green retrofits for affordable housing, and novel insurance products. Similarly, the FHFA should consider recommending that Congress increase the 10 percent net earning AHP contribution requirement to match the federal corporate tax rate, and in the meantime encourage the FHLBanks to voluntarily increase their contributions to the AHP. 12 C.F.R. § 1291.10.

The FHFA should also encourage the establishment of green and resiliency-focused lending programs, products, and pilots. This could be an enormous opportunity for growth while complimenting the FHLBank System's mission of affordable, sustainable housing. As previously discussed, this could include parametric insurance programs, providing prompt payments following a climate-related disaster and allowing affected individuals and businesses to access financial resources quickly; access to low-interest loans or grants for projects such as home retrofits, construction of green infrastructure, or installation of renewable energy system; products and services designed to help individuals and businesses reduce their exposure to climate-related risks such as energy efficiency products and insurance policies tailored specifically for natural disasters; financial products such as green bonds that finance climate resiliency infrastructure projects; and financial literacy education and training focused on climate resiliency in housing.

Further, the FHFA could consider launching new programs that are specifically intended to address climate resiliency in housing finance. For example, a climate risk assessment tool could analyze current and future risks posed by climate events and recommend risk management strategies

tailored to regional FHLBanks and their members. A housing finance for resilient infrastructure program could provide financing for resilient infrastructure projects within the communities served by the member banks, including initiatives for flood control systems, sea walls, green roofs, and other measures designed to reduce the risk posed by extreme weather events.

Additionally, a climate risk education program could provide educational resources tailored to the regions and subregions in which FHLBanks and their member banks operate, providing training on mitigating and adapting to physical and transition climate risks, and include online courses, webinars, seminars, and other materials to help prepare for potential impacts from extreme weather events. Likewise, the FHLBank System could launch a pilot to assist member banks establish expertise and knowledge on climate resilient housing products and policies, which could include training on best practices in financing and creation of a property-level climate risk database that has input from local governments and front-line communities.

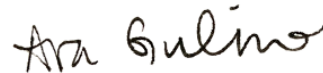
III. CONCLUSION

We thank the FHFA and FHLBank System for their work regarding climate resiliency. We would be pleased to discuss any questions you may have on our feedback. Please contact our Manager for Banking Financial Regulation, Kelsey Condon (kcondon@ceres.org), at your convenience.

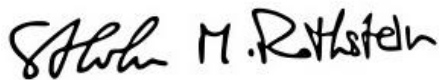
Sincerely,



Kelsey Condon
Manager, Banking Financial Regulation
Ceres Accelerator



Ava Gulino
Associate
Ceres Accelerator



Steven M. Rothstein
Managing Director
Ceres Accelerator