

April 16, 2021

**The Honorable Mark A. Calabria**  
**Director**  
**Federal Housing Finance Agency**  
**400 7th Street, SW**  
**Washington, DC 20219**

Dear Director Calabria,

We are appreciative of the Federal Housing Finance Agency's ("FHFA") outreach to the public through your Request for Input on Climate and Natural Disaster Risk Management ("RFI") issued on January 19, 2021. In the RFI, you invited comment on various climate and natural disaster risk issues, including the 26 questions set out in the RFI ("RFI Questions"). In response, Fannie Mae focuses its comments on broader topics and issues raised by the RFI Questions. With FHFA's role as conservator and prudential regulator of Fannie Mae's operations, we believe FHFA has access to a substantial amount of the information solicited by the RFI Questions.

Addressing climate change and the associated risks is one of the greatest challenges of our lifetime. Fannie Mae appreciates that many individuals, companies, and industry participants are interested in understanding how Fannie Mae approaches climate and natural disaster risk. Both climate and natural disaster risk are important considerations at Fannie Mae, and we hope these written comments will help encourage greater awareness of Fannie Mae's perspective. In this RFI response, we highlight the importance of the issue, our progress to-date, our view of challenges to effectively manage the risk, and recommendations for FHFA.

We believe there are four key actions that FHFA could take to move the conversation forward. **First**, we need to address the lack of standardization in climate-related data, analysis, and disclosures. This is a complex and evolving issue that could benefit from standardization. **Second**, there needs to be increased collaboration across public and private institutions. FHFA has an opportunity to play an impactful convening role, which has the potential to accelerate progress and knowledge sharing in the industry. **Third**, we believe that FHFA should pursue an evidence-based approach to regulation. This is a rapidly developing space, and flexibility in the approach to policy development will be critical. **Fourth**, it is imperative that FHFA seek to minimize the policy impact to vulnerable communities (e.g., low- and moderate-income borrowers) from increasing climate-related risks. Vulnerable communities could potentially be further disadvantaged during the transition to a net-zero carbon economy. Addressing climate change also offers the opportunity to address long-standing disparate impacts to vulnerable communities. Once again, Fannie Mae is very supportive of FHFA's leadership on this issue and our response to the RFI contains additional context on our views. Fannie Mae also hopes that the RFI is an important step in establishing a meaningful dialogue on effective climate and natural disaster risk mitigation strategies as well as the nation's need to maintain support for financing affordable and sustainable housing.

## The Importance of the Issue

Climate change and the transition to a net-zero carbon economy presents both risks and opportunities for the housing market and the overall economy. With the growing and collective interest across the financial services industry from both public and private institutions, there is potential to establish a framework that manages climate-related risks and addresses the disruption caused by natural disasters. Addressing climate and natural disaster risks will be critical to Fannie Mae's overall housing mission and our broader Environmental, Social, and Governance ("ESG") strategy.

The financial services industry is increasingly focused on integrating climate-related risks, impacts, and mitigation strategies into their business strategies and operations. Many industry participants seek to integrate climate-related risk factors into corporate ESG standards to appeal to socially responsible investors. Others, especially federally regulated entities, are preparing more detailed climate-related risk disclosures in anticipation of future regulatory requirements. Finally, other market participants are taking steps to better align their business activities with global climate-related benchmarking targets. We believe interest from



the financial services sector will continue to expand as climate considerations become more formally integrated into the public policies of the United States and other nations.

Fannie Mae is also concerned by potential information asymmetries in the market. While regulators and investors have begun to recognize the threat of climate and natural disaster risk to housing resiliency and sustainability, consumers appear to be discounting the impacts of climate change. We are encouraged by the increased focus on this area, but we are also aware that irrespective of actions taken today to mitigate greenhouse gas emissions, the anthropogenic climate impacts are likely to continue for decades. We believe the best approach is to seek to improve resiliency while working to increase long-term sustainability.

## Our Progress

Fannie Mae was chartered by Congress to support residential mortgage liquidity nationwide. With very limited exceptions (e.g., at-risk properties in communities not participating in the National Flood Insurance Program (“NFIP”) and homes in designated lava zones in Hawaii), Fannie Mae does not disqualify United States single-family or multifamily properties on the basis of geographic location (including properties in Puerto Rico, the United States Virgin Islands, and Guam).

Climate change is a threat across the entire United States. The frequency and intensity of major weather-related events has increased, and this trend is expected to continue into the foreseeable future. Fannie Mae is focused on better understanding the risks resulting from the increasing frequency and intensity of natural disasters (e.g., hurricanes, wildfires, floods). Although Fannie Mae’s financial exposure from these events is mitigated by our geographic diversification across the country, our future exposure has the potential to be significant, particularly in connection with larger events or changes impacting entire geographic regions.

### Focus on Climate

Fannie Mae understands the importance of evaluating climate-related risks to property owners whose homes and apartments secure our approximately \$3.7 trillion guaranty book of business. As a result, we have established a Climate Impact Team to:

- (i) understand our **exposures**;
- (ii) identify best practices and strategies to **mitigate** the impacts such events can have on our guaranty book, sellers, servicers, and borrowers; and
- (iii) increase **awareness** on this issue.

Additionally, one of our main priorities throughout this effort is to understand the potential impacts on vulnerable communities and affordable housing. Fannie Mae is committed to looking beyond the mitigation of our own financial risk, recognizing the real-world impacts of climate change on people who live in the homes and apartments that secure the loans we purchase.

Furthermore, as part of our broader ESG strategy, our Board of Directors established the Community Responsibility and Sustainability Committee (“CRSC”). The CRSC is responsible for overseeing the development, planning, implementation, performance, and execution of significant initiatives and activities related to access to credit, affordable housing, and sustainability. As we mature across our three focus areas, the CRSC and the entire Board of Directors will help develop and drive Fannie Mae’s strategic focus on climate-related issues.

### Sustainability and Resiliency

Fannie Mae’s approach to mitigating climate-related risks is rooted in the complementary concepts of sustainability and resiliency. Our framework seeks to promote overall efforts to improve the resiliency of current housing stock while also working to transition to a more sustainable housing economy with net-zero carbon emissions. We also recognize that the frequency and severity of natural disasters is expected to increase irrespective of actions taken today to mitigate climate change.



## Green Bonds

Fannie Mae has been at the forefront of affordable housing in the United States, providing financing to make homeownership and workforce rental housing a reality for millions of people in America. In 2010, Fannie Mae began expanding its support for working families by committing to improving the energy and water efficiency of multifamily properties. These efficiencies enable more affordable homes for families and individuals, while also making them more cost-effective properties. In 2020, we issued a total of \$13 billion in multifamily green mortgage-backed securities (“MBS”) and \$1.9 billion in green resecuritizations. From 2012 through year-end 2020, Fannie Mae has issued more than \$87 billion in multifamily green MBS and nearly \$11 billion in green resecuritizations.

In 2020, Fannie Mae issued its first single-family green MBS. Our single-family program provides an opportunity to produce significant cost savings to homeowners through more affordable and energy efficient housing. In 2020, our single-family green MBS issuances totaled \$94 million, an important first step. Overall, our green financing business from 2012 to 2019 is projected to prevent approximately 528,000 metric tons of greenhouse gas emissions and save 7.7 billion gallons of water and 7.8 billion kilo British thermal units of source energy.

## Social Bonds

In January 2021, Fannie Mae issued its first social bond. This \$315 million issuance aligned with Fannie Mae’s Sustainable Bond Framework, which sets forth our commitment to adhering to international standards for green, social, and sustainable bond issuances. Fannie Mae has received a Second-Party Opinion on its Sustainable Bond Framework from Sustainalytics, evaluating and affirming the alignment of our framework and proposed eligible project categories with International Capital Market Association (“ICMA”) Social Bond Principles, ICMA Green Bond Principles, and the Sustainability Bond Guidelines. We also affirmed that these investments will lead to positive impacts and advance the U.N. Sustainable Development Goals 1, 7, 10, and 11. Our issuances of green and social bonds demonstrate our commitment to addressing greenhouse gas emissions and to supporting communities during the transition to a net-zero carbon economy.

## Disaster Response and Rebuild

In 2020, there were 22 separate billion-dollar weather and climate disaster events in the United States – a new record.<sup>1</sup> With the increasing frequency and intensity of natural disasters, Fannie Mae has undertaken additional measures to help borrowers, renters, and communities rebuild in the aftermath of a natural disaster.

- In 2018, we established a dedicated Disaster Response & Rebuild group. The team, which typically travels to the affected area, works with impacted communities to help ensure lenders, homeowners, renters, property owners, and community organizations can better access our mortgage relief options. The team also assists with housing rebuild strategies and investments.
- In 2019, we launched Fannie Mae’s Disaster Response Network™. The Disaster Response Network is a consumer call center staffed by Housing and Urban Development approved housing counselors who speed the disaster recovery process with personalized action plans that include help working with Federal Emergency Management Agency (“FEMA”), the Small Business Administration, and insurance claims at no cost to the homeowner or renters living in a property financed through Fannie Mae.
- In our 2020 response to the COVID-19 pandemic, we launched our largest direct-to-consumer marketing effort – the Here to Help campaign. Our outreach efforts highlighted relief options, provided helpful tools and resources, and communicated the latest market information. Nearly 3.5 million people visited our updated KnowYourOptions.com site, and approximately 15,000 consumers took advantage of counseling sessions through the Disaster Response Network in 2020.
- We also established disaster-related payment deferral options for impacted borrowers. These options allow homeowners to forbear mortgage payments, providing them financial flexibility to help recover from losses related to natural disasters.

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<sup>1</sup> National Oceanic and Atmospheric Administration. (2021). Billion-Dollar Weather and Climate Disasters: Overview. *National Centers for Environmental Information*, <https://www.ncdc.noaa.gov/billions/>



Our disaster response engagements are helping us better understand the types of practical measures that help borrowers and communities rebuild faster and more resiliently from a natural disaster. Our disaster response work also demonstrates the positive results that can be achieved through partnerships with community organizations. We believe that to systematically address climate change, we will need to incorporate these local community partnerships with broader efforts. This will allow us to retain local insights while bringing larger scale to the problem.

## Research

Fannie Mae supports research to better understand climate-related risks:

- In 2017, Fannie Mae entered into a sponsored research agreement with the Wharton School of the University of Pennsylvania to evaluate the effect of flood risk on Fannie Mae and, more broadly, the United States housing market. Among the activities conducted under that agreement, the project produced the review paper “Flood Risk and the U.S. Housing Market.”<sup>2</sup>
- In 2019, as part of an effort to determine the reliability of the modeled flood risk predictions at the property level, Fannie Mae evaluated flood damage from Hurricane Harvey to single-family homes securing our mortgage loans. The details of this research, co-authored by Fannie Mae staff and Wharton faculty, appear in a paper entitled “Flood Damage and Mortgage Credit: A Case Study of Hurricane Harvey.”<sup>3</sup> The findings indicated that moderate to severe property damage to a home roughly doubles the likelihood of prepayment inside a Special Flood Hazard Area (“SFHA”). Outside of an SFHA, the observation was an approximately 2.5 times increase in the default rate.
- In the fourth quarter of 2020, Fannie Mae initiated a nationwide survey of homeowners and renters to research the awareness, understanding, and attitudes towards flood risk, flood insurance, and related resources. More than 3,500 participants responded, with participants selected from flood areas with varying levels of risk. This study found that many participants have a significant knowledge gap regarding their risk of flooding. The study also highlighted a lack of understanding of the availability, pricing, and benefits of flood insurance. Complete findings from the study are anticipated to be shared for public awareness and education in the second quarter of 2021.

## Managing Climate-Related Risks

### Framework Alignment

Fannie Mae believes a climate risk framework needs to encompass several important considerations. We need to adopt a common language or taxonomy so that we can develop a common understanding of the issues. We believe the definitions promulgated by the Task Force for Climate-related Financial Disclosures (“TCFD”) are quickly becoming the market standard. In line with industry standards, Fannie Mae views risks to the housing system through the distinct lenses of physical risks and transition risks.

**Physical Risks** – refers to damages stemming from weather or natural disaster events. These risks are categorized as either acute or chronic:

- (i) acute physical risks are events that are immediate (e.g., flooding from major storms, wildfires);
- (ii) chronic physical risks are events that occur over a longer period of time (e.g., rising sea levels that lead to nuisance flooding, rising temperatures that lead to increased occurrences of drought).

Physical risks can have serious financial impacts on homeowners and renters, as well as their physical health and wellbeing.

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<sup>2</sup> Kousky, C., Kunreuther, H., LaCour-Little, M. and Wachter, S. (2020). Flood Risk and the U.S. Housing Market, *Journal of Housing Research*, 29:sup1, S3-S24.

<sup>3</sup> Kousky, C., Palim, M. and Pan, Y. (2020). Flood Damage and Mortgage Credit Risk: A Case Study of Hurricane Harvey, *Journal of Housing Research*, 29:sup1, S86-S120.



**Transition Risks** – refers to risks that arise from changes in policy, consumer behavior, market dynamics, regulatory landscape, and technology.

Transition risks pose a significant risk to the housing market, as shifts in consumer preferences and/or investor appetite for MBS could impact future home prices. Also, a rapid move to a net-zero carbon economy could have significant impacts to carbon intensive industries that may result in material impacts to local economies, another example of transition risk.

We believe that FHFA could play a meaningful role in promoting, supporting, and aligning stakeholders and partners around more robust research on the current and future exposure of the housing market to chronic physical risks and transition risks.

### **Unequal Distribution of Climate Risk**

Physical and transition risks are continuously evolving and are not equally distributed. Notably, the challenges posed by natural disasters and climate risk are greater in low- and moderate-income (“LMI”) and underserved areas, which are disproportionately exposed and whose housing stock is more susceptible to damage during severe weather events.<sup>4</sup>

If the industry moves to quickly implement climate-related adaptations, many households could see significant increases to insurance premiums in recognition of potential climate risk. A rise in climate risk premiums for homes would raise debt-to-income ratios, potentially making some LMI homeowners no longer eligible for financing. Alternatively, if there is a slower roll-out of climate-related adaptations, homeowners in these communities may be at greater risk of exposure to natural disasters that could exhaust their savings and lead to unsustainable homeownership.<sup>5</sup> Furthermore, if homebuyer awareness of climate risk increases, in the absence of homeowner and community investment in mitigation, home prices may decline to reflect the risk of loss from natural disasters or the cost of adequate insurance, if it is available. Additionally, it is a neighborhood by neighborhood issue regardless of whether the above potential effects lead to a loss of home equity for LMI homeowners, fewer LMI borrowers able to qualify to purchase a given home, or increased gentrification of current LMI neighborhoods that are less vulnerable to climate risk. Without subsidies for insurance and mitigation, the cost and home price consequences of climate change and policy responses will likely weigh more heavily on LMI borrowers and outright homeowners. Actions taken to address climate change should ensure a just transition for vulnerable communities.

### **Challenges to Achieving a Robust Risk Mitigation Strategy**

#### **Data Limitations**

As the industry increases its focus on modeling climate impacts, there is a growing realization among interested parties (e.g., regulators, private companies, academics) that climate model results can carry a high degree of uncertainty. Even as these climate-related models improve, a lack of high-quality and comprehensive property-level data continues to place limits on the benefits of these models. For example, the importance of accurate and consistent geospatial data identifying buildings relative to the land parcel is critical for using climate models to determine location-specific climate impacts.

With more experience, the industry is also gaining a better understanding of the importance of data elements that were previously not prioritized in climate modeling. For example, when modeling flood risk, knowing the first-floor elevation is critical to estimating the impact or severity of potential flooding. Where there is missing or limited data, institutions are forced to make conservative assumptions regarding the property, which can result in consumers paying higher prices than would potentially be required with more complete data. As progress is made on obtaining better data, all parties involved should be mindful of protecting individual privacy in the pursuit of better analysis.

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<sup>4</sup> Sisson, P. (2020). In Many Cities, Climate Change Will Flood Affordable Housing, *Bloomberg CityLab*, December 1, 2020, Washington, D.C., <https://www.bloomberg.com/news/articles/2020-12-01/how-climate-change-is-targeting-affordable-housing>.

<sup>5</sup> Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, B.C. Stewart, et al. (2018). Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II., *U.S. National Climate Assessment*.



## Modeling Limitations

Even with more robust data, climate modeling has inherent limitations that make it extremely challenging to translate model results into an institution's financial forecasts. Fannie Mae believes it would be beneficial for regulators to collaborate with institutions to determine how to best disclose internal assessments of where material amounts of climate risk exist in their business lines and their risk management priorities. To the extent these disclosures rely on climate modeling, the institution should clearly explain the assumptions and limitations of such modeling.

Catastrophic event modeling has served an important role in the insurance industry for decades. Catastrophe models help decision-makers understand current and future exposure based upon historical observations. Extending the usage of catastrophe models to climate risk models should be done with full transparency of both the potential applications and limitations of such model usage. For example, catastrophe models are inherently backward-looking and generally do not include a forward projection of the impacts of climate change. Furthermore, there is often a wide disparity in modeled results as models increase in granularity (e.g., property-level results). We believe regulators should support institutions using multiple models to quantify climate-related risks, as recent studies have shown there is considerable benefit to the multiple-model approach.<sup>6</sup>

Recently, the industry has seen the proliferation of climate models that project the impact of climate change beyond the typical climate modeling time horizon. These models and scenarios are incredibly complex and include numerous assumptions about future societal changes. We have spent time reviewing several long-term climate models and discussed these models with other financial services firms. We believe that climate models with long time horizons (e.g., to 2100), a large number of societal assumptions, and geographic resolutions are presently best suited to provide macro indications of future climate risk.<sup>7</sup> Such long-term climate models allow institutions to understand the possible progression of climate risk over time, and can be leveraged by institutions for sensitivity estimates of portfolios and physical locations.

However, we believe these long-term climate models do not yet have the precision (i.e., property level information) to be effective in estimating the future pricing of assets or in accurately evaluating loan underwriting and loan eligibility decisions. Consequently, we believe it would be premature to use climate models for risk assessment and business decision-making.<sup>8</sup> Furthermore, we are concerned that if institutions were required to apply these models beyond their current capabilities, it would negatively impact market perceptions of climate risk disclosures. As climate models mature and the industry builds the capability to effectively translate climate science estimates into financial estimates, climate models should be further leveraged in disclosures and business decisions.

## Scenarios

The industry is converging on a few climate scenarios, with the Network for Greening the Financial System ("NGFS") scenarios, Intergovernmental Panel on Climate Change's ("IPCC") Representative Concentration Pathways ("RCPs"), and Shared Socioeconomic Pathways ("SSPs") getting the most focus. While the NGFS and IPCC scenarios are helpful to understand the broad range of potential outcomes of future climate change scenarios, it is difficult to compare and explain results across these scenarios.

Financial markets are accustomed to nine quarter stress tests (e.g., Dodd-Frank Act Stress Testing), while some firms project internal stress testing as far as 5 to 10 years. One of the key objectives of using standardized stress testing scenarios is to have comparability of results across institutions. However, given the current complexity, implementation choices, and amount of uncertainty in forecasting climate change decades into the future, these climate scenarios do not result in comparability of results between institutions. We believe the industry is years away from achieving comparability of results in climate change models due to challenges with data, models, and scenarios.

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<sup>6</sup> Heinrich, T., Sabuco, J. and Farmer, J.D. (2021). A simulation of the insurance industry: the problem of risk model homogeneity, *Journal of Economic Interaction and Coordination*.

<sup>7</sup> Fiedler, T., Pitman, A.J., Mackenzie, K. et al. (2021). Business risk and the emergence of climate analytics, *Nature Climate Change*, 11:87-94.

<sup>8</sup> Fiedler, T., Pitman, A.J., Mackenzie, K. et al. (2021) Business risk and the emergence of climate analytics, *Nature Climate Change*, 11: 87-94.





In the near-term, we believe regulators should focus on the process for risk management at individual firms as these climate models and metrics mature.<sup>9</sup> In parallel, regulators could develop specific industry scenarios or sensitivity analyses. FHFA would be well positioned to set the parameters of a climate scenario focused on the unique risks of the government-sponsored enterprises (“GSEs”). For housing markets, this could include transition risk assumptions such as weather-related losses, regional home price declines, or regional economic shocks. Over time, implementation guidance relative to these types of climate scenarios could begin moving the industry towards comparability of results.

### Capital Constraints

We believe that the current state of climate risk analytics is not yet mature enough to support the use of distinct capital charges for climate risk. FHFA acknowledged this in their recent enterprise regulatory capital framework, noting that one of the factors in the sizing of the capital buffers for the GSEs was to account for climate risk. As the industry matures and regulators begin to converge on a defined set of climate scenarios for stress testing and capital estimation, we must ensure that capital regimes are coordinated across the regulatory landscape to guarantee equal treatment for the same types of risk, thereby removing opportunities for regulatory arbitrage. In addition, we believe that any supplementary capital charges attributable to natural disaster and climate change risk should account for any current risk-based charges or buffers related to climate change impacts. We believe there is no risk more systemic than the risk of climate change, and consequently that all regulatory changes for institutions should be enacted on similar timeframes.

### Climate-related Disclosures

Leading ESG firms proactively disclose quantitative metrics and qualitative information through three main categories: (1) ESG rating agencies; (2) self-reporting, which results in a voluntarily creation of a report on a company’s activities linked to a sustainability or ESG strategy; and (3) globally recognized reporting standards such as Sustainability Account Standards Board (“SASB”) and TCFD. Investors have been encouraging companies to make disclosures using SASB and TCFD standards/metrics. A Morrow Sodali survey from March 2020 of institutional investors found that 81% of respondents recommended that issuers use the SASB framework to better communicate ESG information and 77% recommended the TCFD framework for disclosure of climate-related financial information.

In considering the disclosure standards for GSE reporting on climate-related risks, Fannie Mae believes that there is a significant opportunity for regulators to work towards aligning with globally recognized standards, prioritizing the SASB and TCFD disclosures. Fannie Mae plans to expand our ESG reporting efforts, including reporting based on the SASB framework. We believe this effort will increase the consistent alignment of measurement metrics within the industry, accelerate uniform adoption of metrics, and support investor disclosures.

### Partnerships and Coordination

Treasury Secretary Janet Yellen made the following remarks at the opening session of the Financial Stability Oversight Council (“FSOC”) on March 31, 2021:

*“Third, we cannot only look back and learn the lessons of last year. We must also look ahead, at emerging risks. Climate change is obviously the big one.*

*It is an existential threat to our environment, and it poses a tremendous risk to our country’s financial stability. We know that storms will hit us with more frequency, and more intensity. We know warming temperatures might disrupt food and water supplies, leading to unrest around the world. Our financial system must be prepared for the market and credit risks of these climate-related events. But it must also be prepared for the best-possible case scenario: that we begin a rapid transition to a net-zero carbon economy, which also creates potential challenges for financial institutions and markets. On*

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<sup>9</sup> Brainard, L. (2021). [The Role of Financial Institutions in Tackling the Challenges of Climate Change](#), speech at the “2021 IIF U.S. Climate Finance Summit: Financing a Pro Growth Pro Markets Transition to a Sustainable Low-Carbon Economy”, Washington, D.C., February 18, 2021.



*all these fronts, the Council has an important role to play, helping to coordinate regulators' collective efforts to improve the measurement and management of climate-related risks in the financial system.”*

Addressing climate change is one of the most complex and challenging issues we will deal with in our lifetime. Fannie Mae commends FHFA for the foresight of soliciting input from a broad range of stakeholders to enhance its ability to identify and assess the GSEs' current and future climate and natural disaster risks, and to improve its supervision and regulation of the GSEs with respect to those risks. Fannie Mae views this as a first step in an iterative, industry-wide process. Following completion of the RFI process, Fannie Mae encourages FHFA to coordinate with other federal financial services regulators on climate and natural disaster risks relating to residential mortgages.

In particular, Fannie Mae recommends that FHFA engage with the regulatory agencies that comprise the Federal Financial Institutions Examination Council (“FFIEC”) and the broader FSOC to consider how mortgage lending and homeownership are particularly vulnerable to climate and natural disaster risk and to develop coordinated prudential regulatory policies relating to climate and natural disaster risk. In addition to this collaboration and coordination, Fannie Mae would encourage FHFA to consider engagements and partnerships with other entities, including FEMA, HUD, state and local governments, the insurance industry, and trade associations. Partnership with academic institutions also merits consideration to complement the diverse perspectives from other stakeholder and to assist with research on the evolving science and impacts from climate change.

Our experience indicates that initial investments made post-disaster are not always directly linked to the community's or individual's long-term recovery. We believe that improved collaboration with these entities pre-disaster will: reduce overall taxpayer outlays; provide efficiently-targeted funding; better allocate responsibilities for participating organizations; accelerate disaster mitigation; promote more resilient rebuilding; reduce fraud; and, most importantly, enhance the disaster survivor's recovery. The recently launched effort to execute a nationwide plan to rebuild our national infrastructure is an example of where strong collaboration across agencies and stakeholders could yield material results in improving the resiliency of the housing market.

Given the size and scale of this problem, strong partnerships will be critical. At the same time, Fannie Mae believes that there are benefits to regulators proceeding cautiously when considering the imposition of mandatory standards. In this regard, Fannie Mae shares the view of Federal Reserve Governor Lael Brainard, who cautioned in a February 18, 2021 speech:

*“Although there are benefits to standardization in some areas such as data and taxonomies, it is not clear a highly prescriptive approach would be the most effective way to ensure financial institutions are well-prepared for the range of possible impacts of climate change, even if the execution burden is low. Ultimately, the outcomes are likely to be more robust if we innovate and experiment, and leverage a range of complementary approaches being developed in both the private and the public sectors.”*

### **Policy Considerations**

The transition of climate-related risk to homeowners and renters, especially those in vulnerable communities, is going to be a key challenge for policymakers and industry leaders. Interestingly, the industry's recent experience in managing the COVID-19 crisis may be instructive. Like many natural disasters, COVID-19 entailed large-scale economic disruption and massive job losses, especially for vulnerable communities. FHFA's guidance to provide liberal use of short-term forbearance during the COVID-19 crisis has proven highly effective in addressing adverse impacts to homeowners and renters. As natural disaster events become more prevalent due to climate change, FHFA could collaborate with the GSEs to continue to develop creative solutions in the areas of forbearance and loan modification that promote sustainable housing, while also mitigating risks to the GSEs and taxpayers.

Furthermore, when developing a regulatory framework for climate risk for the GSEs, FHFA should also account for the different climate risk profile of the GSEs relative to other large banking institutions and insurance companies. For banks, transition risk is typically the primary climate risk that impacts asset valuations, corporate lending, and results in stranded assets. The GSEs, on the other hand, provide comprehensive credit-risk guarantees on 30-year residential mortgages. Consequently, the GSEs are not only focused on current acute physical risks, but also on the increasing impact of climate change over decades and the chronic physical risks that manifest over time and negatively impact home prices.





## Recommendations

We believe there are several steps that FHFA should take to ensure that the housing finance system is resilient to climate-related risks.

### *Standardization of Climate-related Data, Analysis, and Disclosures*

The evidence of climate change is universally accepted within the scientific community and broadly within society. However, the magnitude of that change and the corresponding impact is highly uncertain. Predicting the impact of physical risks over many years, and even decades, is extremely challenging, especially given the multitude of non-linear relationships inherent in this type of modeling. Furthermore, it is extremely challenging to predict the transition risk scenarios that could play out across the numerous vectors that could impact the housing market (e.g., policy changes, consumer behavior, market demand, litigation).

Despite this uncertainty, FHFA has an opportunity to increase confidence in climate projections through greater standardization of inputs and outputs. For inputs, FHFA can leverage its relationships with government agencies and private sector firms such as the GSEs and Federal Home Loan Banks (“FHLBs”) to address climate-related data limitations and gaps in the housing sector (e.g., first floor height, building construction, basement presence, geospatial location). Addressing these data limitations will take time, but FHFA can lead the effort to prioritize current data issues that hamper analysis of climate risk. In addressing the data limitations and the topic of data in general, FHFA must be mindful of protecting individual privacy in the pursuit of better analysis. FHFA can also increase alignment on the RCP scenarios so that results are more comparable across institutions. For outputs, FHFA should leverage the broad momentum across the industry on standards (e.g., TCFD) and seek opportunities through collaborative partnerships to influence industry standards.

### *Collaboration Across Public and Private Institutions*

We would recommend that FHFA work to build relationships across the regulatory and industry landscape. Examples of potential partners include FEMA for policy and data, United Policy Holders and the National Association of Insurance Commissioners for alignment of insurance coverages and risk mitigants nationally, and non-profit organizations such as the Enterprise Corporation and their Ready to Respond initiative. This is just a starting point -- more partnerships will be needed as the scale and magnitude of climate-related risks will require collective insight and action. By developing these collaborative partnerships, FHFA will be better equipped with information on public and private expectations to provide balanced and pragmatic regulation while ensuring that the GSEs have appropriate climate risk oversight.

### *Evidence-based Approach to Regulation*

As the market moves to better understand climate risk and standardize key inputs and outputs, we recommend that FHFA take an evidence-based approach when rolling out regulatory requirements. Overall, the industry will be best served by allowing participants to rationalize the collective understanding of climate risk and incentivize further innovation regarding climate modeling and climate mitigation tools. Furthermore, the need for regulation must also take into consideration the transition risks for consumers who have not had the opportunity to prepare for these changes.

Fannie Mae believes in a comprehensive, collaborative approach across government and the financial and housing industries to better understand and quantify climate risk. Fannie Mae is concerned that a premature regulatory response may be either too broad or too narrow to mitigate known risks, or potentially be counterproductive by failing to address unrecognized risks. Fannie Mae requests that FHFA move cautiously in responding to the RFI, as depending on the scope of the regulatory measures, they could raise housing costs for homeowners and renters, or worse, preclude the GSEs from purchasing new mortgage loans based on the location and/or construction methods of the mortgaged property. In short, following the RFI, we believe FHFA’s must engage in deep “safety and soundness” discussions aimed at developing potential consensus on quantifying the GSEs’ exposure to climate and natural disaster risks. This step would be an important prelude to developing a range of alternative mitigation approaches and weighing their respective impact on the GSEs’ mission to provide mortgage liquidity for affordable and sustainable housing.



Additionally, Fannie Mae believes that FHFA should evaluate, but exercise caution, before adopting standards developed by other prudential regulators that apply to climate and natural disaster risks that impact areas outside of the residential lending and housing setting. Attempting to overlay prudential standards designed for other activities and industries (e.g., for commercial banks) may prove to be counterproductive. In developing standards, Fannie Mae encourages FHFA to remain focused on those aspects that set residential mortgage lending apart from other activities, and work with trade associations, state governments, federal agencies, and lenders on finalizing standards. The climate and natural disaster risk standards developed by other regulators will certainly inform and enlighten FHFA efforts. However, Fannie Mae submits that FHFA is uniquely positioned to evaluate the relevant climate risks and mitigants considering the congressionally mandated mission of the Enterprises to provide liquidity and enhance housing affordability, especially for low- and moderate-income families.

### ***Consideration of Policy Impact to Vulnerable Communities***

As FHFA considers policies and initiatives to address climate-related risks, the impacts to LMI and underserved communities should be a high priority. These are some of the most vulnerable communities from a social and financial perspective. In many situations, decades of systematic inequities have disadvantaged these communities. The COVID-19 crisis exposed many of these issues across the country, where we saw record unemployment and adverse health and other social hardships. The transition towards a net-zero carbon economy and the implementation of climate risk mitigation options could limit opportunities for individuals in vulnerable communities to have access to sustainable and affordable housing. Secure, stable, and resilient housing is a tremendous opportunity to build generational wealth. Fannie Mae believes that climate policy changes, where possible, should take into consideration the potential impact on vulnerable communities and opportunity to alleviate the inequities (e.g., inclusionary regulation that incentivizes investment in at risk communities) that exist in the market today.

Sincerely,

A handwritten signature in cursive script that reads "Jeffery Hayward".

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