Written Testimony of Carolyn Kousky¹ Associate Vice President for Economics and Policy, Environmental Defense Fund

Hearing on Factors Influencing the High Cost of Insurance for Consumers

Subcommittee on Housing and Insurance of the Financial Services Committee

United States House of Representatives

October 24, 2023

Good afternoon. I would like to thank Chairman Davidson, Ranking Member Cleaver, and the members of the subcommittee for the invitation to speak to you today. I am the Associate Vice President for Economics and Policy at the Environmental Defense Fund (EDF). One of the world's leading international nonprofit organizations, EDF creates transformational solutions to the most serious environmental problems. To do so, EDF links science, economics, law, and innovative private-sector partnerships. With more than 2.5 million members and offices in the United States, China, Mexico, and the European Union, EDF's experts are working in 23 countries and across the U.S. to turn our solutions into action.

Current Dynamics in Property Insurance Markets

Our property insurance markets are now front-page news as many households struggle to find insurance they can afford, if they can find it at all. In the last year alone, State Farm, Allstate, and AIG have left California. Farmers Insurance has left Florida, following the flight of many others in prior years and dozens of insolvencies. In Louisiana, a dozen insurers have abandoned the state in the past three years, 11 others have declared bankruptcy, and 50 have stopped writing policies in certain parishes.²

When insurers don't exit markets, they are raising prices. The average cost of homeowners insurance has increased dramatically in high-risk areas. Between 2018 and 2023, several states have seen premium increases of over 40%, including Texas, Arizona, California, Colorado, and

¹ Carolyn Kousky is Associate Vice President for Economics and Policy at the Environmental Defense Fund. She is the author of the recent book, *Understanding Disaster Insurance: New Tools for a More Resilient Future*. She is a member of the U.S. Department of Treasury's Federal Advisory Committee on Insurance, the vice-chair of the California Climate Insurance Working Group, a non-resident senior fellow at the Brookings Metro program, a non-resident scholar at the Insurance Information Institute, and a member of the Roundtable on Risk and Resilience of Extreme Events at the National Academies of Sciences, Engineering, and Medicine. She has a BS in Earth Systems from Stanford University and a PhD in Public Policy from Harvard University.

² McDaniel, J. (2023). Citing Climate Change Risks, Farmers is Latest Insurer to Exit Florida. *Washington Post*. July 12.

Florida. But this is not a problem limited to a few locations, as other states such as Illinois, Nebraska, and Utah, have also seen rates increase substantially.³

Consumer reports of restricted coverage have accompanied these price increases, with growing concerns about sublimits, which restrict payouts for certain types of losses, higher deductibles, and policies that only offer actual cash value (the depreciated value of items) and not replacement cost (the cost to buy a new replacement item). Indeed, insurers have spoken publicly about how they are increasing restrictions on the policies they write and limiting coverage through higher deductibles and limits on items such as roof replacements.⁴ All of this leaves policyholders more exposed and lowers their financial resilience.

Disaster Insurance in Context

Disasters have always been difficult for the private sector to insure. This is because they violate the mathematical laws that are foundational for all insurance. Even without looking at equations, it is easy to intuitively understand. At the heart of insurance is risk pooling. Consider getting a group of people together to cover losses from automobile accidents. Every year everyone puts a small amount of money in the pool and whenever someone has a crash, they get to take the funds out of the pool to cover the damage. This works because everyone doesn't crash at the same time, so there are always enough funds to help those who do have an accident. Insurance formalizes this idea of shared risk and cost: the contribution is your premium and the amount received is the claim.

But with disasters, lots of people suffer a loss at the same time. And those losses can be really severe. This means that in a bad disaster year, insurance firms could face a huge amount of claims payments—far more than they take in from annual premium revenue. In these disaster years, insurance companies need access to enough funds to pay all the claims without going bankrupt. This could be achieved by holding more surplus, purchasing reinsurance (their own version of insurance), or by transferring risks to the financial markets through tools like catastrophe bonds. None of these are free, however, and the costs will be passed on to customers. This means that disaster insurance is fundamentally more expensive than non-disaster insurance and it can sometimes exceed what consumers are willing or able to pay.⁵

³ S&P Global Market Intelligence (2023). Farmers, USAA Boost Homeowner Insurance Rates by Double Digits in 2023. RateWatch. October 3.

⁴ Eaglesham, J. (2023). Home Insurers are Charging More and Insuring Less. *The Wall Street Journal*. Jul 30.

⁵ Kousky, C. and R. Cooke (2012). Explaining the Failure to Insure Catastrophic Risks. *The Geneva Papers* 37: 206-227.

In response to these challenges, government has intervened in disaster insurance markets repeatedly over the last century. Private insurers stopped writing flood insurance over 50 years ago, and we now have a federal flood insurance program that provides the vast majority of residential flood insurance nationwide. In response to challenges insuring against damages from high winds from hurricanes, every state in the southeast has created its own quasi- to fully public insurance program to provide homeowners insurance or wind-only policies for those who cannot find coverage, or affordable coverage, in the private market. California established an earthquake program after insurers fled the state following the Northridge earthquake. And many states have FAIR (Fair Access to Insurance Requirements) plans that, while perhaps not originally designed for climate perils, are now covering them to a larger extent, such as California's offering wildfire coverage. As can be seen, government involvement in disaster insurance markets is not new and the public and private sector must work together toward shared aims of financial protection for households and communities.

Climate Change is Breaking Insurance Markets

What is new is first, that risks are getting so high that even carefully crafted balances between public and private risk sharing are now breaking, and second, that there is no relief in sight. Climate change is now driving up the risks of weather-related disasters, making them much more likely, and much more severe, while also increasing the chance of multiple disasters occurring at the same time. As emissions continue, the risks will only continue to grow. These climate impacts are driving a large amount of the current market stress we see in property insurance markets in so many places around the country.

At this moment, there are also other pressures in property insurance, such as higher interest rates and higher costs of rebuilding, which mean higher premiums for consumers. And the reinsurance market is feeling these same stresses, as well, leading to a hard market for insurers. This is how climate change operates: in conjunction with other stresses. While these other stresses may also need policy attention, at the base of the current challenges in insurance markets are fundamentally higher—and ever rising—risks.

-

⁶ See: (1) Xi, D., N. Lin, and A. Gori (2023). Increasing Sequential Tropical Cyclone Hazards Along the US East and Gulf Coasts. *Nature Climate* Change 13: 258-265. (2) McGinnis, S., L. Kessenich, L, Mearns, A. Cullen, H. Podschwit, and M. Bukovsky (2023). Future Regional Increases in Simultaneous Large Western USA Wildfires. *International Journal of Wildland Fire* 32(9): 1304-1314.

The lack of timely and dramatic reductions in greenhouse gases has increased the risk of a range of weather-related extreme events, ⁷ increasing their frequency and/or their severity. Climate change is also altering the spatial distribution of risk, increasing risks in areas previously considered safe. For example, in the past year, Louisiana has had to deal with wildfires and Southern California with a hurricane—historically rare for both places, but perhaps not rare going forward. Climate scientists predict continued intensification of hurricanes, growing numbers of extreme downpours, more flooding, longer and hotter heatwaves, expanded drought, and much higher wildfire risk. ⁸ Climate change is also leading to sea-level rise, threatening coastal communities around the world with chronic flooding and saltwater intrusion of drinking water supplies even before property is actually lost to the sea.

These weather-related extreme events are imposing substantial economic costs. The global reinsurance firm Swiss Re estimated that in 2022, natural catastrophes caused \$275 billion in economic losses and that insured losses have been growing annually by 5-7% "driven by rising loss severity." These disasters are also severe negative financial shocks to households, causing damage to homes, contents, and cars, as well as non-property losses, such as evacuation expenses, service disruptions, and lost income from business interruption. ¹⁰

These growing costs to households mean that insurers must make not only more frequent payouts on their insurance policies, but larger payouts. For example, Milliman, an actuarial consulting firm, estimated that the 2017 and 2018 wildfires in California led to losses for insurance companies that wiped out three decades of profits earned in the state twice over. Such losses for insurers, and the knowledge they could keep rising, are driving up the cost of insurance and, in the extreme, leading insurers to exit markets when they can no longer profitably offer coverage for such extreme risks.

⁷ See, for example: Diffenbaugh, N. S., D. Singh, J. S. Mankin, D. E. Horton, D. L. Swain, D. Touma, A. Charland, Y. Liu, M. Haugen, M. Tsiang and B. Rajaratnam (2017). "Quantifying the influence of global warming on unprecedented extreme climate events." *Proceedings of the National Academy of Sciences* **114**(19): 4881-4886.

⁸ USGCRP (2018). Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. U.S. Global Change Research Program.

⁹ https://www.swissre.com/institute/research/sigma-research/sigma-2023-01/5-charts-losses-natural-catastrophes.html

¹⁰ You, X. and Kousky, C. (2023). Improving Household and Community Disaster Recovery: Evidence on the Role of Insurance. Available at SSRN: https://ssrn.com/abstract=4365715.

¹¹ Xu, E. J., C. Webb, and D. D. Evans (2019). Wildfire catastrophe models could spark the changes California needs. Milliman White Paper, October.

Risks and Costs Hit Hardest Those Least Able to Bear Them

The diminishing appetite of the insurance and reinsurance sector to provide coverage in hotspots for climate-related perils is pushing that risk on to those least able to manage it: underresourced households. As costs spike, there is increased reporting that households that have paid off their mortgages are simply dropping insurance altogether when they can no longer afford it. ¹² This practice of "going bare" is alarming because there is robust research evidence that insurance is critical to disaster recovery and economic resilience. When households have insurance, they have fewer unmet needs and lower financial burdens. And as more people in a community have insurance, local economic activity can resume faster. ¹³ Insurance is also protective against needing to borrow, poor mortgage performance, and bankruptcy. ¹⁴ We also know from research that without insurance, people can spiral into deeper levels of financial stress. Prior research has found that lack of insurance can be a driver of ever widening inequality after a disaster ¹⁵ as those with insurance rebuild and get back on their feet and may be even upgrade their home, while those without insurance struggle to make ends meet and may fall behind on bills or have to live in a damaged home as months stretch into years with very little help forthcoming.

As insurers exit markets, it also puts increasing pressure on the state insurance programs as consumers turn to government programs when the private market fails them. For example, the number of residents seeking coverage from Florida Citizens, that state's public program, has been steadily rising. As of September 2023, the program had over 1.4 million policies-in-force, making it the largest insurer in the state. Louisiana Citizens has also swelled dramatically, requiring rate increases, and the California FAIR plan has been taking on more customers from high wildfire-risk areas. The state of Colorado, which unlike many other disaster-prone states, did not previously have a state insurance program, just recently was forced to create one as growing wildfire risk threatens to destabilize their insurance market. The state programs face

_

¹² See: (1) Dagher, V. (2023). Americans are Bailing on their Home Insurance. *The Wall Street* Journal. August 28 (2) Acosta, D. (2023). Home Insurance is So High in This Florida Town, Residents are Leaving. *Washington Post*. October 17.

¹³ You, X. and Kousky, C. (2023). Improving Household and Community Disaster Recovery: Evidence on the Role of Insurance. Available at SSRN: https://ssrn.com/abstract=4365715.

¹⁴ See: (1) Billings, S. B., E. A. Gallagher, and L. Ricketts (2022). Let the Rich be Flooded: The Distribution of Financial Aid and Distress After Hurricane Harvey. *Journal of Financial Economics* 146(2), 797–819. (2) del Valle, A., T. C. Scharlemann, and S. H. Shore (2022). Household Financial Decision-Making after Natural Disasters: Evidence from Hurricane Harvey. Finance and Economics Discussion Series 2022-015. Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/FEDS.2022.015 (3) Kousky, C., M. Palim, and Y. Pan (2020). Flood Damage And Mortgage Credit Risk: A Case Study Of Hurricane Harvey. *Journal of Housing Research* 29(sup1), S86–S120.

¹⁵ Rhodes, A. and M. Besbris (2022). Soaking the Middle Class: Suburban Inequality and Recovery from Disaster. Russell Sage Foundation.

the same fiscal challenges as the private market and the growing tensions between fiscal soundness on the one hand and affordability and availability on the other.

The Need to Reduce Risk

Since a major driver of stress in markets is higher risk levels, the most effective solution will be concerted efforts to lower that risk. This is the hard work of building stronger, avoiding development in the highest risk areas, and investing in protective infrastructure—both green and gray—that is built with our future climate in mind.

There are currently more federal dollars for mitigation than previously. This includes \$3.5 billion to the Flood Mitigation Assistance Program from the Infrastructure Investment and Jobs Act; \$2.3 billion in FY22 for the new Building Resilient Infrastructure in Communities (BRIC) grant Program; \$0.5 billion to the new state revolving loan funds (Safeguarding Tomorrow through Ongoing Risk Mitigation Act); as well as the \$3.5 billion to the Hazard Mitigation Grant Program, due to the 4% set aside from the Covid-19 declarations. In addition, funding from the Community Development Block Grant – Disaster Relief (and CDBG – Mitigation) program, when authorized, can provide substantial funds for risk reduction. These funds are an important step forward, although they are still insufficient to the task at hand. For example, FEMA received requests for twice as much funding as they had to allocate in the latest round of BRIC grants. ¹⁶

With these funds available, we now need to do more to link our investments in risk reduction with insurance market stability. Right now, there is sometimes a disconnect between the investments communities believe they are making in resilience and the pricing and availability of insurance. Instead of simply exiting markets and reducing coverage, insurers could be doing more to vocally inform and guide the measures that are necessary to preserve insurability. Insurer input on the types of risk reduction that is needed to preserve a stable market could help improve the use of federal dollars—and this includes information on which areas are no longer insurable, even with mitigation measures, since the risk has gotten too high.

Many risk reduction efforts must necessarily be local, but there are several actions the federal government can take in support of these needed efforts. The first is conditioning federal dollars on construction to a building standard that accounts for growing risk over the life of the structure or the infrastructure. One example of this is the Federal Flood Risk Management Standard. Other federal tools include the minimum building requirements set by the National Flood Insurance Program or the requirements on federal grants, such as Community

¹⁶ https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities/after-apply/fy22-status.

Development Block Grant – Disaster Relief grants from the Department of Housing and Urban Development. These approaches are now being examined and should be adjusted to guide greater investments in safe building.

We know how to build stronger in the face of disasters. For example, the Institute of Building and Home Safety has developed the Fortified standard to protect homes against high wind and the Wildfire Prepared Home program for wildfires. Despite research that building to these standards increases the value of homes,¹⁷ is cost-effective (saving more in damages than it costs to meet the standard),¹⁸ and lowers insurance prices,¹⁹ most at-risk homes are still not built to these standards. Incentives and education about the need to build to these standards in areas prone to those perils could help encourage more states and communities to support safer building through building codes as well as incentive and grant programs. The federal government can also provide direct support to lower-income communities for these needed upgrades to at-risk buildings.

We must also reform our post-disaster rebuilding programs, including both our federal programs and the operation of our insurance policies. Currently, it is too difficult for households, businesses, or communities to rebuild safer and in light of climate risks, especially if that means moving the location of building or substantially changing the structure. It is imperative that we make rebuilding for our climate future the easy path and not the hard path. We need more post-disaster dollars for mitigation that arrives quickly, greater flexibility in our regulations to allow for climate resilient changes, and greater support and resources to help households, businesses, and local governments incorporate these changes in the chaotic environment of post-disaster rebuilding. Insurance can support this through required endorsements that provide needed funding for climate-resilient rebuilding and individualized guidance on mitigation priorities and the rebuilding process.

Finally, the public sector can ask for greater assurance and transparency that both household and community level mitigation measures are appropriately captured in the catastrophe models used for rate setting. As investments in mitigation measures expand, those need to be captured in the models used for both underwriting and pricing to guarantee insurers are reflecting the reduction in risk provided by the investments. This can then also allow for greater transparency for consumers on what mitigation measures will be rewarded by insurers.

7

¹⁷ Petrolia, D., S. Ishee, S. Yun, R. Cummings, and J. Maples (2021). Do Wind Hazard Mitigation Programs Affect Home Sales Values? *Journal of Real Estate Research* 45(2): 137-159.

¹⁸ Orooji, F., Friedland, C. J., R. D. Savio, A. Taghinezhad, C. C. Massarra, N. Bushra, and R. V. Rohli (2021). Generalized Cost-Effectiveness of Residential Wind Mitigation Strategies for Wood-Frame, Single Family House in the USA. *Frontiers in Built Environment* 24(7): doi.org/10.3389/fbuil.2021.745914.

¹⁹ https://fortifiedhome.org/incentives/

Improving Consumer and Community Risk Information

But, far too often, not only do consumers have no information on mitigation and links to their insurance, but they lack any information on the risks they face at all. In order to invest more effectively in risk reduction, households and communities need good information on climate perils and how they are projected to change. In many cases, however, insurers know more about the risks their clients face than they do.

There is lots of data and sophisticated modeling available for those that can afford to pay for it – and it is critical that it is available and can be harnessed by large institutions like insurers. But we also need to make sure that households, under-resourced communities, and small businesses have access to the information they need, too. Markets, we know, only work well when information is transparent to all parties. And climate information is a public good—meaning everyone benefits from it.

Governments are often the providers of public goods, but we are failing in providing the needed risk information to our citizens at the moments they most need it. For example, while FEMA has done a laudable job in modernizing their rate setting and ensuring that flood insurance prices reflect the full range of risks a property faces, that has not translated over to mapping or risk communication. The FEMA flood maps that communities use are still too often based on outdated data and analyses, continue to perpetuate a false thinking that flood risk is binary (either in the "zone" or outside it), and fail to communicate any information on increasing flood risk from climate change to households or communities.

We also do not have the institutional arrangements in place to ensure that decision-makers get the information they need at the time they need it or we intentionally withhold material information from markets with a belief we need to do so to protect privacy or stabilize housing values—but what this does is just push the day of reckoning and impose costs on people unaware and in a way that can unintentionally trap them in risky situations.

Consider someone moving into a new location. There are now places they can go online to look up flood risk information, which is a huge improvement. Groups, such as the First Street Foundation, are trying to bring that information directly to them in housing listings instead of requiring people to know they need to seek it out and where to find it.

But we also know that much important information is missing. Most state flood disclosure laws only require a potential buyer to be told if they are in a FEMA flood zone, but as discussed above, those are poor measures of flood risk. Despite flood insurance being provided by a

public-sector program with one price per home set nationally by the federal government, households cannot easily look up the full cost of flood insurance, even though that is financially important for their decisions about whether they can afford to live somewhere and is likely a better indicator of risk than FEMA maps. Households are also not told other critical information, such as whether the property they are considering buying is one loss away from being a repetitive loss within the NFIP, which could drive up flood insurance costs and indicates very high risk. We too often see stories of people who move somewhere without good understanding of the cost of risk and who would have chosen differently had they known. An easy online look-up tool from FEMA could close many of these information gaps related to flood risk specifically.

Those are gaps in communicating today's risk. We also face a huge challenge in communicating about future risk. No one tells people when they are moving into an area with ever-increasing disaster risk, which will mean ever-rising insurance premiums. Households need to understand how risk will change over their expected lifetime in a location and, yet very often they are not told anything about this. This information is essential to help motivate and justify investments in risk reduction that bring down that risk and keep it more affordable to live somewhere.

Communicating future risk does raise implementation challenges, but many non-governmental groups are racing to fill them. We need our institutional frameworks and public policies to do the same.

Ensuring Equitable Access to Financial Protection

Finally, I want to end by talking about how we can improve equity in disaster recovery and the role of insurance in that goal. Disasters impose unequal costs, with lower-income households and households of color suffering a disproportionate burden.²⁰ This is driven by higher exposure to hazards, greater physical vulnerability to their impacts, and lack of access to sufficient resources for recovery. Without sufficient post-disaster resources, climate extremes can be tipping points into financial precarity, as households may have to defer important expenses, such as healthcare and debt servicing, and are more likely to default on loans, accumulate debt, and exhaust savings; these long-term negative impacts on financial health are much more likely for households that were already financial constrained.²¹

²⁰ See: (1) Board of Governors (2022). Economic Well-being of U.S. Households in 2021. Board of Governors of the Federal Reserve System. (2) Hallegatte, S., A. Vogt-Schilb, J. Rozenberg, M. Bangalore, and C. Beaudet (2020). From Poverty to Disaster and Back: A Review of the Literature. *Economics of Disasters and Climate Change* 4, 223–247

²¹ See, for example: (1) Ratcliffe, C.; Congdon, W.; Teles, D.; Stanczyk, A.; Martín, C. (2020). From Bad to Worse: Natural Disasters and Financial Health. *Journal of Housing Research* 29 (sup1), S25–S53. (2) Fothergill, A.; Peek, L. A.

Insurance could play a pivotal role in providing financial protection for those most in need. Unfortunately, right now, disaster insurance is typically unaffordable for those who need it most, could have limitations on coverage of which consumers are unaware, the claims process may contain procedural inequities, and it may not cover key needs. There are many policy and regulatory reforms, as well as private sector innovations, that can help make disaster insurance more inclusive in the face of growing risks. "Inclusive Insurance" refers to any insurance approach that aims to make appropriate coverage available and affordable to individuals currently under-served or unserved by the market. As we have explored in a recent report, initiatives for inclusive insurance for climate disasters help build a system that is affordable, accessible, transparent, people-centered, and just.²²

While much policy and regulatory reform around insurance must be centered at the state level, given the state-based nature of insurance regulation, there are several reforms at the federal level that could support greater inclusivity in insurance markets. Congress could adopt a meanstested assistance program for the flood insurance program, which has been discussed at length by FEMA, the National Academy of Sciences, previous testimony of mine, and many other sources. The Federal Insurance Office can continue its work, in collaboration with the National Association of Insurance Commissioners, to obtain data on insurance policies and claims in order to better understand and track of both concerns about insurability difficulties and areas of disproportionate impact.

New private sector products, such as parametric microinsurance, for example, can also help fill current gaps in recovery. These are low-premium, but also lower-coverage, policies designed to either address immediate needs, to provide some coverage for the uninsured, or to cover non-property losses not covered by other insurance policies. ²³ As of today, however, Puerto Rico is the only U.S. jurisdiction with a microinsurance market. To expand the number of households with this financial protection, there are also innovations happening to couple such policies to other products, like microfinance, or to embed them in other governmental or charitable programs. The insurance sector should be encouraged and supported by both regulators and public policy to explore such options and bring them to market.

^{(2004).} Poverty and Disasters in the United States: A Review of Recent Sociological Findings. *Natural Hazards* 32 (1), 89–110.

²² Kousky, C.; French, K. Inclusive Insurance for Climate-Related Disasters: A Roadmap for the United States; Ceres, 2022

²³ Kousky, C., Wiley, H., and Shabman, L. (2021). Can Parametric Microinsurance Improve the Financial Resilience of Low-Income Households in the United States? *Economics of Disasters and Climate Change*, 5 (3), 301–327.

Going Forward

We are at an inflection point in our disaster insurance markets. Climate change risks are starting to stress them to the breaking point. In response, risk has been shifted out of the private sector and into the public sector and off insurers and back on to households and small businesses. If we let the public assumption of risk unfold in an ad-hoc way without being thoughtful about what that means or how it should be structured, we will miss important opportunities, like predicating such socialization of risk on serious investments in risk reduction and in elevating the importance of inclusive access to insurance as a necessary social good. And if we allow this shifting of risk to simply continue without the right public policy frameworks, we could also raise the odds that we strain public sector programs to the fiscal breaking point. And that would have even deeper ramifications for housing markets, local economies, and people's wellbeing.

And we must not simply replace private coverage with uniformly subsidized public coverage, but instead heed the warning signs from the industry: some locations are becoming too risky for us to continue business-as-usual. These are places where we need drastic changes in where and how we are building to bring the risk back down to manageable levels. Insurers exiting markets is a sign of growing risk that has surpassed their ability, even with global reinsurance, to offer coverage profitably. Risk management can be difficult because people don't "see" risk in their daily lives. As we continue to warm the planet, risks of all weather-related disasters are increasing, but that growing risk is often not appreciated until the inevitable tragic disaster occurs. Let us take the crisis in our insurance markets now as the signal it is and double down on climate adaptation and risk reduction. This not only will help preserve insurance markets, but will reduce the range of uninsurable losses and pain and suffering that comes with disasters, as well.

Finally, we need to recognize the essential role insurance plays in the financial safety net of households and communities, not by subsidizing risk across the board and suppressing important market signals, but by adopting policies designed to help those most in need. Meanstesting for flood insurance would be an important first step since flooding is one of the most widespread natural disasters. This can be supported by innovative insurance products better designed to meet the needs of frontline communities. Government partnerships and specific regulatory structures for those innovations will be needed to spur such private sector activity.

What we now know is that the financial pressures on states, communities, and households will continue to increase as extreme weather becomes both more frequent, more widespread, and more severe. Updated building codes and standards, better risk mapping and education, and new financial tools and strategies will all need to be implemented. The insurance industry will

not be able to fix these problems on their own, and neither will states. That is why this subcommittee's interest in examining these questions is so critically important, and why Environmental Defense Fund is so appreciative of hearings such as this one. We look forward to continuing to support this critical work.