

## CLIMATE INSURANCE WORKING GROUP MEETING | November 2, 2022

### Meeting Minutes

#### Participants:

Alice C. Hill (Chair) | Senior Fellow for Climate Change Policy at the Council on Foreign Relations

Carolyn Kousky (Vice-Chair) | Executive Director, Wharton Risk Center

Serena Sowers | Vice President, Public Sector Solutions North America, Swiss Re

Sona Mohnot | Greenlining

Lloyd Dixon | Senior Economist at the RAND Corporation and Director of RAND's Center for Catastrophic Risk Management and Compensation

Louis Blumberg | Principal of Blumberg West Consulting

Katelyn Roedner Sutter | Climate Program Manager, Environmental Defense Fund

Raghuveer Vinukollu | Natural Catastrophe Solutions Manager, Munich Re

Michael Lynes | Policy Director, Audubon

Mike Peterson | California Department of Insurance

### Meeting Minutes

**Mike Peterson** provided logistical details to public participants and working group members.

**Alice Hill** welcomed the working group members, stated that at the previous meeting the working group members gave final comments on the implementation update for the climate insurance report and thanked the working group members for their continued participation, insights, and thoughtful comments on the implementation of the recommendations in the Climate Insurance Report. Our main goal here today is to give feedback to updates from the department of insurance on three topics. Extreme heat, insurance approaches to under-insurance, and further progress on harnessing nature-based solutions to protect communities.

**Mike Peterson** shared that the update for today is about what the department is trying to work on moving forward and this provides an opportunity for feedback and input from the group members as we make implementation decisions and plans. We at the Department of Insurance have worked on a concept for extreme heat that we think aligns with the recommendations in the extreme heat section of the Climate Insurance Report that is focused on catalyzing new insurance concepts ways in which insurance policies may be able to offset some of the costs of addressing extreme heat or provide um important financing for interventions. We took this to heart and spent a lot of time looking into some of the fundamental questions about what we could do as a Department, in terms of research and convening partners and stakeholders to come up with one or more draft insurance concepts. At this point we have a draft of that concept, and our goal today is to present it to you, and then provide several weeks for you to read and consider other ideas and priorities, and the mechanism we've laid out, and then the next time we meet we um, you could provide maybe more subsequent um input, on this. This is this is definitely an iterative process. Ultimately, our goal is for this concept to be implementable by a wide variety of jurisdictions, which is going require tailoring to the needs of specific communities. Mike Peterson then introduced Deborah Halberstadt, Senior Climate Policy Advisor, Department of Insurance.

**Deborah Halberstadt** thanked the working group for the opportunity to present and shared that the Department had been working on this extreme heat concept since the release of the climate insurance working group's report. She presented the concept developed by the Department on extreme heat impacts and insurability.

- Extreme heat is one of the deadliest outcomes of climate change, causing deaths, hospitalizations, emergency room visits and long-term health impacts in California and many locations in the world. The heat domes in the Pacific Northwest in 2021, and in Europe in 2022 and just a few months ago that heat waves like hurricanes and tornadoes and other disasters disrupt local economies. They disrupt transportation systems, hospitals, and critical infrastructure. The impacts disproportionately affect communities of color people with disabilities, seniors, children, outdoor workers, and low income communities, and the cost of the extreme heat and the impacts reveal these protection gaps, which were discussed at length in the climate insurance working group.
- Without risk reduction, we can anticipate insufficient hospital capacity, lost revenue for businesses due to disruptions and spiking costs for local governments.
- With all of these impacts in mind CDI set out to develop an insurance concept that would address extreme heat. The working group called on the Department to catalyze new insurance pilot projects, and specifically identified parametric and community based insurance as concepts that we should explore. We have followed that directive, and we engage with a variety of stakeholders to explore all different kinds of approaches to using insurance as a means of communicating and reducing and transferring risk associated with extreme heat.

- CDI looked at opportunities that would address immediate preparedness and response needs and approaches that would look at long-term innovations like ensuring the urban forest or premium discounts for buildings that invest in novel cooling technologies. The proposal presented today focuses on a parametric insurance approach to provide assistance to local governments, tribes, and public health agencies in order to avert the most acute immediate impacts posed by extreme heat.
- The current focus is on local governments and tribes and public health agencies as the insured parties, because we felt that they were better suited than individual consumers to negotiating and understanding parametric insurance contracts.
- The policy concept (written form is in the working group materials) envisions an insurance policy that would ensure pre and post disaster, mitigation expenses to protect neighborhoods from these acute risks associated with heat, and it would be activated when predetermined triggers are met. The goal here is to reimburse the community for expenses associated with protective actions that they take before and during a heat wave, you can imagine a neighborhood, expending additional funds on temporary cooling shelters for the unhoused or increased numbers of vans to transport seniors to cooling centers or utility credits for running the air conditioning expanded hours or expanded in home services for those who cannot leave their home. Hospitals may need to rent generators and chillers to continue operating. Local governments might need to cool their infrastructure like bridges or light rail to keep them operating.

**Mike Peterson** thanked Deborah for the presentation, notified the members that they could find a written description on the CDI Climate and Sustainability website, and then asked if there were any questions or comments on the drafted concept on extreme heat.

**Carolyn Kousky** shared that she had a few comments on the presentation. First, as these new programs are being rolled out, I think two of the big challenges that you hit on are what's the level where this is cost-effective for the local government. Addressing very frequent events, probably doesn't make sense. This is probably more a higher severity, low frequency, event. And then also how much money they need for that type of event, and how do you figure out an appropriate threshold for coverage. She suggested some kind of contingent funding to help the pilot be as informative as possible when it may be unknown the costs related to certain types of events.

Alice Hill shared a comment that in the some of these regional parametric insurance that have been established in the Caribbean and Africa, it has been a problem for some participating countries that, for example, the event never occurred, and then the political leaders are criticized for spending money for something that they didn't need. You know that that happens with insurance? She agreed with Carolyn's point that de-risking this as we are trying to learn from it would help it be successful

**Louis Blumberg** asked about how the triggers would be utilized and whether the ranking could include both health impacts and meteorology?

**Yommy Chiu** commented that it is really important to understand the drivers of costs because when it comes to extreme temperature, one of the costs that can be treated as a separate consideration is the costs of utility. You can have different solutions depending on what the driver of you want to actually tackle from an insurance standpoint. And what you like to pilot. The second comment she made was that one of the things that drive up insurance costs or affordability is the complexity of the structure and solution that you would like to design. And so, from a pilot perspective, I guess the question to think about is, what would a meaningful pilot look like? How can it be simplified so that it does not become overburdened with costs.

**Sona Mohnot** commented that she was interested in how this model compares to a Government grant program?

**Deborah Halberstadt** responded that one of the benefits of a parametric model is that it is not a reimbursement like a grant might be. If an event happens that triggers the policy, then the money is provided to the community. Some agencies, like the Office of Planning and Research and the Department of Public Health have significant funds to use for the impacts of climate-intensified events, and insurance can play a role in the layering of disaster resilience financing.

**Sona Mohnot** asked a further question regarding the guard rails around what the insurance payments can be used towards. A lot of the communities that we work with. I think things that come up as gaps when during extreme heat weather is just being able to afford access to transit, addressing emergency health issues and not being able to pay for access, cooling or not being able to pay for air conditioning. Are those examples the types of things that this could cover, or if there are a guard rails around what the policy could cover.

**Deborah Halberstadt** confirmed that those examples are consistent with what the draft insurance concept envisions and what the policy could cover, in addition to whatever the community has identified and the public policy around. And that's why I think something like a heat action plan would be really valuable.

**Michael Peterson** asked if there were any additional comments or questions from the working group members.

There were none.

**Michael Peterson** asked for any public comment.

There was none.

Agenda Item 2. Underinsurance

**Mike Peterson** presented an overview on insurance data and how state regulators are thinking about underinsurance. Wildfire underinsurance was the topic of the 6<sup>th</sup> wildfire recommendation in the Climate Insurance Report. One consistent problem with underinsurance is that it is really hard to measure or detect until an event happens. At that time, the costs to rebuild are revealed in full and the costs may or may not be fully covered by a coverage limit.

The State of Colorado did something really interesting last spring, and that is that in the aftermath of the Marshal Fire, which is a fire that occurred in December of last year the Colorado Insurance Commissioner collected data from insurance companies that were operating in their state on the claims and the losses from those fires, and notably, Colorado added in a couple of extra categories to try to understand underinsurance.

They basically asked what amount of square foot was the home, and using that number, they were able to multiply out and estimate that at a rebuilding cost of two hundred and fifty dollars per square foot. Under that estimate, thirty-six percent of homes were under insured.

When Colorado used three hundred dollars a square foot as the estimate, fifty-five percent of homes were underinsured. And, at an estimate of three hundred fifty dollars per square foot, sixty-seven percent of homes were underinsured.

Looking at the magnitude of underinsurance, these estimates equated to a range of averages between ninety thousand dollars of underinsurance to the over two hundred thousand dollars of underinsurance per home.

**Michael Peterson** asked if there were any additional comments or questions from the working group members.

There were none.

**Michael Peterson** asked for any public comment.

There was none.

### Agenda item 3. Nature-based solutions

Mike Peterson presented an overview of the Department's approach to integrating nature-based solutions into community pilot projects. One of the other recommendations from the Climate Insurance Report was to catalyze Nature based insurance solutions. CDI is looking for opportunities to integrate nature-based solutions into insurance approaches and advocating for the state to fund pilot projects.

We are really interested in developing an idea on insurance for urban forests we have been able to identify that there's a potential gap when you plant new trees if those trees are lost within the first three to five years. That means, even after investment in planting trees, that community is not going to have that protection from extreme heat moving forward.

In addition, there was a white paper published in 2021 with the title, Nature's Remedy, which focused on improving flood resilience through community insurance and nature based mitigation. This project was focused in Missouri, on flood risk related to river flooding. The paper links together the natural infrastructure of the floodplain management with insurance for flooding. This is a concept that maybe we should look at in California, and I thought it would be relevant and timely to know more about it. Raghuvver was one of the leads on the paper, which is located on our Climate and Sustainability webpage.

**Raghuvver Vinukollu** presented the paper. The project leaders looked at this scenario as an important example, where we could demonstrate the importance of nature-based solutions and the natural infrastructure wherein a levy set that was used in one in one hundred event. After the 2019 floods, where the levy failed, the Army Corps of Engineers was exploring the idea of a levy set back as a better way to reduce flood risks. The quantification of that levy setback was that the standard of protection of the levy in that region improved from a fifty-year standard of protection to a two hundred year standard of protection. The analysis was done by the Army Corps of Engineers itself, with their hydraulic modeling and hydrological modeling. We incorporated that analysis in terms of showing the benefits of the improved protection on insurance. What we did was we took about 1500 homes in the in the zip codes that got the benefit from this risk reduction, which was again identified by the Army Corps of Engineers, and we took 1500 homes because they were right next to the river, about five miles from the river. It's a very flat region.

We did a full-limit policy for all homes of all the 1500 homes. We found the payment would decrease from about \$1,100 to around \$600, and then, incorporating the rest of the mitigation, came down to \$300, so that was really the benefit of it.

**Carolyn Kousky** commented that she thought it was a really interesting study. In my conversations with local governments there are very few that are in a position to actually do anything like community insurance, and it could be because of authorities, it could be because they're unwilling or unable to make sustained budgetary commitments to it. It could be because they're unwilling to tax their residents for something they don't think their residents really want.

**Raghuvver Vinukollu** agreed with Carolyn's point and commented that City of Norfolk, Virginia is one example where they are starting to look into incorporating this community insurance wording within their floodplain management uh and and bring it to the to the community. Because ultimately what these communities are realizing is low and moderate income communities don't have any policy at all. If after a major

event, these communities don't recover, then there are many lasting impacts and also will cause impacts with the tax base of the city.

**Michael Lynes** commented that the challenge of getting local governments to really adopt this and take it forward anytime they have additional financial burdens. Are there ways to that we can continue to try to like normalize with local governments the real threats, and the and the solutions provided. I think there's just education that's going to have to happen with the local decision makers

**Alice Hill** asked if there were any further comments

**Louis Blumberg** commented that funding that was provided in this Year's budget for regional adaptation planning and that those guidelines have not yet been written for those grants. This might be some opportunity to partner with a local jurisdiction and develop a community based product at this point as a pilot.

**Michael Peterson** asked if there were any additional comments or questions from the working group members.

There were none.

**Michael Peterson** asked for any public comment.

There was none.

**Alice Hill** thanked Louis for the comment, thanked the working group members for their time and discussion, and adjourned the meeting.