

CLIMATE INSURANCE WORKING GROUP MEETING | SEPTEMBER 10, 2019

**California Department of Insurance
300 Capitol Mall, 17th Floor
9:30 a.m. – 1:30 p.m.**

I. Welcome and Introduction by Commissioner

Commissioner Ricardo Lara discussed the importance of connecting insurance solutions with communities around the world facing climate risk. Risk varies globally and locally, with consequences that affect the environment but also the economy and health of different communities. The Climate Insurance Working Group convenes experts to evaluate access to insurance products, assess risk opportunities, and forge policy recommendations. The California Department of Insurance (CDI) is uniquely positioned to promote resiliency and would like the group to work towards thoughtful and groundbreaking recommendations.

II. Recognition of group membership and Chair, as convened by the Commissioner

Commissioner Ricardo Lara identified the working group members, Chair and Vice-Chair and took roll.

Participated by Phone:

Carolyn Kousky (Vice-Chair) | Executive Director, Risk Management and Decision Processes Center, Wharton School of the University of Pennsylvania
Butch Bacani | United Nations, Principles for Sustainable Insurance Initiative
Alice C. Hill (Chair) | Research Fellow at the Hoover Institution at Stanford University
Kathy Baughman McLeod | Director, Adrienne Arsht-Rockefeller Foundation Resilience Center at the Atlantic Council
Daniel Firger | Co-Founder, Great Circle Capital Advisors

Participated in Person:

Commissioner Ricardo Lara | California Department of Insurance
Jorge Ramos | Associate Director, Jasper Ridge Biological Preserve, Stanford University
Kristen Pawling | Sustainability Program Director, Los Angeles County Chief Sustainability Office
Raghuveer Vinukollu | Natural Catastrophe Solutions Manager, Munich Re
Serena Sowers | Vice President, Public Sector Solutions North America, Swiss Re
Sona Mohnot | Greenlining
Michelle Passero | The Nature Conservancy
Michael Lynes | Audubon Society Director of Public Policy
Lauren Navarro | Environmental Defense Fund

III. Review and confirm working group procedures, timelines and standards

Commissioner Lara described the procedures, timelines for meetings, and expectations for recommendations from the working group. The meetings are open to the public. The Commissioner suggested members send a delegate on their behalf if the board member is unable to attend a meeting. He also proposed making all public comments directly at the meetings or send comments to the Department of Insurance to be shared at the next meeting. Meetings will occur approximately 3-4 times each year.

Commissioner Lara invited public comment. There was none.

IV. Introductory remarks by all working group members, starting with the Chair

Chairperson Alice Hill welcomed the group and shared her hope for the working group to identify innovative products that demonstrate how nature-based solutions leave us better prepared and save us money. Chairperson Hill would like to identify locations in California for potential projects and possibly utilize forecast-based insurance, particularly with the intention to prepare and protect underserved communities where there is great need for immediate assistance when disaster strikes.

Vice-chairperson Carolyn Kousky also welcomed the group and shared her optimism for the group to do ground-breaking work together. Vice-chairperson Kousky finds the convening of the working group particularly well-timed as globally there is increased interest and engagement on the topic of addressing climate risk.

Member Raghuveer Vinukollu emphasized the continuous focus he has placed on resiliency throughout his career. Resiliency is specifically important in the reinsurance industry and can be approached in two ways: Bottom-up, wherein the focus is increasing the take-up rate and top-down, where the focus is thinking about mitigate strategies. Member Vinukollu co-authored a white paper with The Nature Conservancy that demonstrates how the concept of risk-transfer and risk-mitigation can be combined successfully.

Member Kathy Baughman McLeod shared her ongoing involvement, first with The Nature Conservancy and then with Bank of America, in developing strategies and processes for insuring natural assets. She recently co-authored a white paper with The Nature Conservancy that is a guide on how to insure a natural asset. Member Baughman McLeod identified that the trend of people understanding their own risk has never been higher and that presents an opportunity to change the market with one-stop financing that quickly identifies the risk, identifies what it will cost to reduce that risk, and identifies a mechanism to finance that risk reduction all in one.

Member Butch Bacani spoke about his experience as the Programme Leader for the UNEP's Principles for Sustainable Insurance Initiative (PSI), the largest collaboration in the United Nations. Generally, the PSI has worked to develop how the role of the

insurance industry can be fully harnessed in responding to climate risk. Member Bacani discussed how climate risk can be addressed from risk management and investment perspectives. He finds that nature-based solutions to be an area where the insurance industry can improve and shared that there will be an announcement shortly of a significant climate risk global partnership that will increase accessibility to climate risk insurance for developing countries, including the possible role of microinsurance. Member Bacani sees the working group as a chance to open the door for nature-based solutions around the world. The reason why the message of the working group, and the Commissioner, is very powerful, is that it is all connected, and the agenda is to value nature and make it the heart of the connection.

Member Jorge Ramos discussed his experience working in coastal ecosystems with Conservation International (CI) and combining components like restoration, protection, and community-based conservation stock into community conservation projects worldwide. Member Ramos shared the challenges he faced in helping communities understand concepts like carbon content and carbon risk. He discussed the importance of taking care with how incentives are presented to communities and making sure communities understand the trade-offs. Member Ramos co-authored an educational illustrative book on nature-based solutions that shares mitigation and adaptation components.

Member Dan Firger shared his perspective on California's unique leadership role in addressing climate risk, finding that the impact of California's forward thinking across every level of climate risk management over the past few decades is setting a precedent across the world. The global nature of the climate risk challenge and standard-setting where the private and public sectors can work together towards a solution is important. Member Firger is hopeful that the working group will produce ideas that can serve other states and act a springboard for a global approach to climate risk and insurance.

Member Serena Sowers emphasized Swiss Re's strength and longevity as a reinsurance company that has existed for 150 years and discussed Swiss Re's commitment to address climate risk issues and solutions for the last several decades. Member Sowers shared that Swiss Re recognizes that to continue to flourish another 150 years they must prioritize climate adaptation issues and use their force as a large reinsurer to drive the market towards these changes. She would like the working group to utilize the depth of the Department's experience in California to inform the group's understanding when discussing ideas in meetings. In her experience working with governments, from the local to federal level, there is a fundamental misconception of risk and a misalignment of responsibilities. Having access to the Department's institutional knowledge and experience will help to develop tools for understanding and addressing those issues.

Member Michelle Passero leads The Nature Conservancy's climate change efforts in California. Her work has focused on mitigation and carbon sequestration. She is interested in the opportunity to integrate climate risk topics holistically and identify new options which should open funding opportunities. Like the global projects other working

group members have discussed, such as insuring the coral reef in Quintana Roo, Member Passero wants to find corollaries to those projects in California. She is currently exploring managed retreat options for wetlands and green space buffers around communities for wildfire risk. She is interested in how different insurance products might be linked.

Lauren Navarro shared that she is attending from the Environmental Defense Fund. She is interested in what can be done to reduce climate pollutants and reduce community exposure to climate dangers. Particularly she is concerned with prevention and mitigation and the impact of climate risk on the health of vulnerable communities. In addition, she hopes the group will explore how different opportunities to reduce emissions may exist in commercial, auto, and homeowners insurance policies.

Member Mike Lynes discussed his background as a conservationist and environmental defense lawyer. His focus has been on restoring habitats, working on grasslands, wetlands and the coast, and communicating benefits of investments to consumers, governments and financial sectors. Member Lynes stated that he hoped the group could generate ideas that would guide the state in its investments in natural areas to reduce carbon emissions, benefit ecosystems, and increase resiliency.

Member Sona Mohnot began her work in environmental justice after living through Hurricane Katrina. She witnessed the effect the disaster had on the affordability and availability of insurance for disaster victims. Similarly, following the wildfires in recent years in California, farmworkers who could not afford to not work and did not have access to protective gear faced climate-related health risks. Focusing on underserved communities and how insurance products can, following a disaster, provide better results for those communities who might not have as many resources available is important.

Member Kristen Pawling spoke about Los Angeles County's groundbreaking ambition on climate issues and nature-based solutions with a focus on equity and resilience. Her office has listened extensively to communities and organizations to hear what a sustainability plan means for the people of Los Angeles. Their plan includes 159 actions that assess climate vulnerability and examine social and physical issues. In this work they have partnered with the Southern California Resilience Initiative and Hilton. Major vulnerabilities they have identified are wildfire and extreme heat.

Commissioner Ricardo Lara emphasized the impressive breadth of this dynamic working group membership. He finds access and availability of insurance and land use decisions to be critical components to their work. He views insurance as a tool to mitigate and change human behavior for the better—change human behavior and protect natural environment.

Commissioner Lara invited public comment. There was none.

V. Discussion and vote to establish protocol for members to be added or leave the working group

Commissioner Lara proposed that members can leave the group at any time, and that if additional members are added they must be approved by two-thirds of the group. Anyone in the working group can propose new members.

Commissioner Lara invited public comment. There was none.

BREAK: The working group took a brief break and then resumed the meeting.

VI. Discussion on working group priorities and timelines

The working group resumed the discussion by identifying themes and ideas to think about for the next meeting. CDI Deputy Commissioner Mike Peterson offered to bring in existing state plans and frameworks for the group to examine to see how insurance might be integrated.

The group identified ideas and questions to be considered in their work moving forward:

- The value of using incentives and involving candidate communities and willing insurers for pilot projects.
- The necessity of mitigation against multiple perils alongside any effort promoting insurance take-up.
- The difference between individual mitigation and community mitigation efforts.
- The importance of assessing physical and social vulnerability. Is a community willing and able to accept and implement suggestions?
- Evaluating potential partners. Who does the working group wish to engage besides the insurance industry?
- The importance of accurately identifying stakeholders. Who ultimately ends up paying for disasters in the long run?
- The value of being able to quickly identify opportunities and test ideas.
- The value of community-based policies and local government-based policies.
- How can risk and cost be transferred at the local government level?
- How can pre-disaster funds be achieved when many local governments are already struggling financially?
- The lack of understanding of how fires burn.
- The value of looking to other countries and continents to learn from their mitigation successes.
- The lack of statewide mitigation standards.
- Exploring the application of the California Environmental Quality Act (CEQA) to land use planning.
- The importance of building a culture of participation.
- What can be done to research and inform risk models to look at different climate change models applicable to California?
- The value of focusing on identifying the risk and then developing an innovative solution versus focusing on what is the existing insurance solution.

- The value in considering the role insurance can play in promoting climate safe behavior to lower emissions and therefore lower risk.
- The importance of grounding recommendations in examples.
- Where can insurance provide the most value? Where are the biggest gaps?

VII. Discussion on nature-based solutions and potential California applications

The group identified ideas and questions to be considered in their work moving forward:

- Risk pooling (Example: Caribbean Catastrophic Risk Insurance Facility).
- Satellite-based parametric insurance – Issues payment before a disaster occurs (Example: Kenya Livestock Insurance Program).
- Community-based policy purchased by the community or local government on behalf of the community.
- Community-based policies to cover exposures that are not otherwise protected against.
- Incorporate modeling into land development decisions.
- Distinct language is necessary when discussing different kinds of mitigation.
- Important to balance thinking clearly about California-specific ideas and solutions that work within state, community, constituency and political dynamics with how the group might generalize its ideas to act as models for others moving forward.
- Greenhouse gas mitigation to mitigate the harmful impact effect of carbon or other types of pollutants to the health of Californians.
- Non-Physical Damage Business Interruption (NDBI) – an innovative parametric product that can be applied in a California wildfire context, specifically to small businesses, that covers all the different expenses that are immediately incurred.
- The Central Arizona-Phoenix Long-Term Ecological Research (CAP LTER) creates solutions and mitigation strategies for extreme heat dangers. The research station incorporated an urban heat island project where they found that urban heat affects mostly underserved communities, African Americans and Latinos, including an adverse health impact. The research also indicated that urban heat is exacerbated by the lack of green and natural areas in those communities as well. There is not a direct impact on infrastructure. Consequently, when it comes to allocating resources, the business park that needs cooling gets the investment, not the underserved community.
- Can a product be developed where a percentage of the premium dollar goes towards mitigation efforts?
- Commissioner Lara shared that his goal is improving resiliency by reducing climate risks to California communities.

Commissioner Lara invited public comment on items VI and VII. There was none.

VIII. Discussion on next meeting date, Closing Comments and Adjournment

Chairperson Alice Hill thanked the working group and shared her confidence in their ability to provide value and excitement for the working group's future work.

Vice-Chairperson Carolyn Kousky stated she found the conversation productive and looks forward to narrowing the ways in which in the working group will provide value.

Deputy Commissioner Peterson advised there is a meeting tentatively scheduled for November 8, 2019 and that he'd like to have another meeting in the end of January. He will confirm with the membership regarding availability.

Commissioner Lara thanked Deputy Commissioner Peterson for his excellent work in helping to convene the Climate Insurance Working Group.

Commissioner invited public comment. There was none.