

Draft date: 3/7/24

2024 Spring National Meeting  
Phoenix, Arizona

**CLIMATE AND RESILIENCY (EX) TASK FORCE**

Monday, March 18, 2024

9:30 – 10:45 a.m.

Phoenix Convention Center—301 B-D West—Level 3

Lori K. Wing-Heier, Co-Chair	Alaska	Grace Arnold	Minnesota
Ricardo Lara, Co-Chair	California	Mike Chaney	Mississippi
Andrew R. Stolfi, Co-Vice Chair	Oregon	Chlora Lindley-Myers	Missouri
Jeff Rude, Co-Vice Chair	Wyoming	Eric Dunning	Nebraska
Mark Fowler	Alabama	Scott Kipper	Nevada
Peni Itula Sapini Teo	American Samoa	D.J. Bettencourt	New Hampshire
Barbara D. Richardson	Arizona	Justin Zimmerman	New Jersey
Alan McClain	Arkansas	Alice T. Kane	New Mexico
Michael Conway	Colorado	Adrienne A. Harris	New York
Andrew N. Mais	Connecticut	Mike Causey	North Carolina
Trinidad Navarro	Delaware	Jon Godfread	North Dakota
Karima M. Woods	District of Columbia	Judith L. French	Ohio
Michael Yaworsky	Florida	Glen Mulready	Oklahoma
Gordon I. Ito	Hawaii	Michael Humphreys	Pennsylvania
Dana Popish Severinghaus	Illinois	Alexander S. Adams Vega	Puerto Rico
Doug Ommen	Iowa	Elizabeth Kelleher Dwyer	Rhode Island
Vicki Schmidt	Kansas	Michael Wise	South Carolina
Sharon P. Clark	Kentucky	Tregenza A. Roach	U.S. Virgin Islands
Timothy J. Temple	Louisiana	Kevin Gaffney	Vermont
Robert L. Carey	Maine	Scott A. White	Virginia
Kathleen A. Birrane	Maryland	Mike Kreidler	Washington
Gary D. Anderson	Massachusetts	Nathan Houdek	Wisconsin
Anita G. Fox	Michigan		

NAIC Support Staff: Aaron Brandenburg/Libby Crews

**AGENDA**

1. Consider Adoption of its 2023 Fall National Meeting Minutes Attachment One  
—Director Lori K. Wing-Heier (AK)



2. Receive a Federal Update—*Shana Oppenheim (NAIC)*
3. Hear a Presentation on Innovation for Climate Risk Reduction and Resilience—*Francis Bouchard (Marsh McLennan)* Attachment Two
4. Hear a Presentation from Resilient Methow Attachment Three  
—*Tom Jones and Dana Golden (Resilient Methow)*
5. Receive an Update from its Solvency Workstream  
—*Commissioner Kathleen A. Birrane (MD)*
6. Discuss Any Other Matters Brought Before the Task Force  
—*Commissioner Ricardo Lara (CA)*
7. Adjournment

## Draft Pending Adoption

Draft: 12/12/23

Climate and Resiliency (EX) Task Force  
Orlando, Florida  
December 3, 2023

The Climate and Resiliency (EX) Task Force met in Orlando, FL, Dec. 3, 2023. The following Task Force members participated: Lori K. Wing-Heier, Co-Chair (AK); Ricardo Lara, Co-Chair (CA); James J. Donelon, Co-Vice Chair (LA); Mike Kreidler, Co-Vice Chair (WA); Mark Fowler (AL); Alan McClain (AR); Barbara D. Richardson (AZ); Michael Conway (CO); Andrew N. Mais (CT); Karina M. Woods (DC); Trinidad Navarro (DE); Michael Yaworsky represented by Virginia Christy (FL); Gordon I. Ito (HI); Doug Ommen (IA); Dana Popish Severinghaus represented by Bruce Sartain and K.C. Stralka (IL); Amy L. Beard represented by Patrick O'Connor (IN); Sharon P. Clark (KY); Gary D. Anderson represented by Jackie Horigan (MA); Kathleen A. Birrane (MD); Timothy N. Schott (ME); Anita G. Fox (MI); Grace Arnold (MN); Chlora Lindley-Myers (MO); Mike Chaney represented by Andy Case (MS); Mike Causey represented by Robert Croom (NC); Jon Godfread (ND); D.J. Bettencourt represented by Christian Citarella (NH); Justin Zimmerman (NJ); Alice Kane (NM); Scott Kipper (NV); Adrienne A. Harris represented by Bob Kasinow (NY); Judith L. French represented by Tom Botsko (OH); Andrew R. Stolfi (OR); Michael Humphreys (PA); Elizabeth Kelleher Dwyer (RI); Michael Wise (SC); Scott A. White (VA); Kevin Gaffney (VT); Nathan Houdek represented by Sarah Smith (WI); and Jeff Rude (WY).

### 1. Adopted its Oct. 12 Meeting Minutes

Director Wing-Heier said the Task Force met Oct. 12 and took the following action: 1) received an update on the work of Canadian insurance regulators after the release of their position paper on flood risks and insurance solutions in Canada; and 2) received a report on data trends in the private flood insurance market based on NAIC annual statement filings.

The Task Force also met Nov. 17 in regulator-to-regulator session, pursuant to paragraph 8 (consideration of strategic planning issues) of the NAIC Policy Statement on Open Meetings, to review the NAIC National Climate Resilience Strategy for Insurance (Climate Resilience Strategy).

Commissioner Kreidler made a motion, seconded by Commissioner Fowler, to adopt the Task Force's Oct. 12 minutes (Attachment One). The motion passed unanimously.

### 2. Heard a Presentation from CarbFix on Carbon Capture Technology

Commissioner Kreidler said a variety of strategies to tackle climate change are needed. He said one strategy is carbon capture and storage, which involves capturing carbon before it goes into the atmosphere and storing it underground. CarbFix is an Iceland company doing this groundbreaking work and looking to expand into the U.S., Canada, India, and elsewhere. CarbFix uses an innovative technology to capture carbon and injects the carbon half a mile deep underground in basalt, where it turns into stone within two years. He said CarbFix will open an office in Washington connected to a major grant to do a demonstration project.

Edda Bjork Ragnarsdottir (CarbFix) gave a presentation about how CarbFix captures carbon and turns it into stone, similar to what occurs in nature today but at a faster pace. She said the first priority is to reduce emissions, but not all industries will be able to go net zero. She said there is not a lot of time to act, but the needed technologies exist. She said to meet the climate goals that have been set with the parties' agreement, 115 billion tons of carbon must be captured and stored by the end of 2060. Ragnarsdottir said this is where CarbFix comes into play.

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Ragnarsdottir said the process is relatively simple, only needing three ingredients: 1) water; 2) basaltic rock (which is the most common rock on earth); and 3) carbon. Using the water as a means of transport, the carbon is injected into the ground about 300 to 500 meters, which would be below any groundwater. The carbon fills up the pores of the basaltic rock, so there is no increase in volume. She said storing carbon in the ground in gaseous form could allow the gas to escape. The new technology mineralizes the carbon so it cannot leak out to the atmosphere and is more cost-effective than other solutions. She said more than 100 scientific studies are available on CarbFix's website.

She said the most cost-effective method is on-site capture and mineral storage, where the emission is captured straight from the chimney and injected into the ground at the same location; direct capture using direct capture companies who gather carbon from the atmosphere; and transport (such as trains) using a transport mineralization storage. CarbFix is also doing research to potentially use seawater and other rock formations for injection.

Ragnarsdottir said the U.S. has enough basaltic rock that 7,500 billion tons could be stored there alone, which is much more than the 115 billion tons that need to be stored by the end of 2060. She said the younger the basaltic rock, the more porous, and the more carbon that can be stored.

Ragnarsdottir responded to Commissioner Ommen that she will ask her scientists whether oxygen is also "locked down" in the process.

Commissioner Godfrey said North Dakota has funded a similar carbon capture storage project called Project Under and will begin construction next year. He said North Dakota has the largest fully permitted storage project in the U.S., and Wyoming is another state with primacy on regulating the space. He said the broader regulatory authority is challenged with seeking permits from the Environmental Protection Agency (EPA).

### 3. Heard a Presentation from Aon on Parametric Insurance

The Task Force heard a presentation from Katie Sabo (Aon) on Aon's parametric solutions for public entities. Sabo said parametric products are being more widely used and cover such situations as produce that is extremely weather sensitive, renewable energy where output is reliant on weather conditions, and flight delays over a certain amount of time.

Sabo said that some estimates are that only 30% of losses from natural disasters have been covered by insurance over the last 10 years, meaning 70% of losses are absorbed directly or indirectly by some level of government. She said parametric products are extremely useful when there are wide-ranging non-property losses, which is why parametric products are now being used in public entities' resiliency plans to cover net losses not covered by the federal government. She encouraged the use of parametric solutions to fill gaps within traditional insurance policies and to help provide coverage for difficult-to-insure or uninsurable risks.

With a product in place in Puerto Rico covering natural disasters, other states are also exploring the use of parametric insurance for exposure, such as earthquake cover. Sabo said parametric products can be structured in an infinite number of ways, from extremely complex to simple. A state would need to describe its need, perhaps to protect its net budgetary losses following a catastrophic loss. She said the state can define a threshold, such as the epicenter of an earthquake being in a specific area and the earthquake reaching a specific magnitude. If the earthquake reaches the predefined threshold, the cover would pay based on the payout table. The parametric insurance payout table would then be adjusted based on the budget available. For example, the payout might increase by intensity or might be limited based on the capacity to buy. Perils being insured range from hurricanes, hail, and tornadoes to more emerging areas such as temperature (heat or freeze).

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Sabo responded to a question from Commissioner Gaffney, saying flood is possible to insure, given they are able to get information from satellite providers and more detailed data. She said parametric insurance is very tailored to a specific customized solution based on location.

### 4. Adopted the NAIC Climate Resilience Strategy

Director Wing-Heier said the Task Force met in regulator-to-regulator session Nov. 17 to preview the Climate Resilience Strategy that Task Force leadership developed. She said the strategy is a forward-looking plan that represents how state insurance regulators are working together to address the growing challenges to resilience in state markets. She said climate resilience is an issue state insurance regulators have worked on for years, and that foundation is what enables this first-ever NAIC strategy.

Director Wing-Heier said the timing is critical for multiple reasons: 1) the NAIC is close to releasing a national data call on insurance availability and affordability, which will be able to inform the implementation of this Climate Resilience Strategy; 2) the Task Force has several strong deliverables on climate resilience and combining those various deliverables into a unified state-regulator strategy makes them more valuable to members (for example, at a regulator-to-regulator meeting in July, the Task Force saw a preview of the NAIC Protection Gap Dashboard, and the Task Force can move quickly to make that dashboard more useful to members and the organization); 3) The NAIC recently signed a memorandum of understanding with the Insurance Institute for Business and Home Safety (IBHS), providing a timely partnership on risk mitigation research that can strengthen advocacy for federal funding. She said the proposed Climate Resilience Strategy would take the Task Force's existing work and put that work in a clear and well-coordinated framework that the NAIC can implement.

This Climate Resilience Strategy document: 1) highlights accomplishments and diverse state approaches; 2) creates tools to assist regulators, consumers, and industry; 3) focuses on state authority and jurisdiction; 4) defends and strengthens the state-based system; and 5) provides clear goals and objectives.

Director Wing-Heier explained the five major elements of the strategy. She said the first resiliency action is to identify and coordinate how to measure protection gaps and then set priorities for reducing those gaps. The aim is to help the Task Force better understand insurance availability and reliability in state markets and empower Commissioners with information to communicate with local governments, consumers, businesses, and the agencies in our jurisdictions that manage the risk of wildfires, floods, and extreme heat. She said it is a powerful message to demonstrate where risk mitigation can improve insurability.

The second resiliency action is to create a new blueprint for expanding flood insurance options. State insurance regulators cannot only rely on the National Flood Insurance Program (NFIP) to close protection gaps for flooding. Regulators have talked for years about the need for more private flood insurance, and this action will be an opportunity to take a hard look at new products and bring together examples of what individual states are doing to encourage flood insurance uptake.

The third resiliency action is to bring together the data from the upcoming property and casualty (P/C) data call with additional resources to understand how insurance companies are reacting to risk, whether that is retreating from areas, increasing deductibles, or decreasing coverage limits. Director Wing-Heier said there is a strong synergy between the NAIC Center of Excellence (COE) on Catastrophe Modeling and the nationwide data that state insurance regulators will be getting through the NAIC data call. That synergy will give state insurance regulators an opportunity to make more thoughtful conclusions from the data.

The fourth resiliency action is to create and coordinate new resilience tools to assist all state insurance regulators in developing or refining state-level incentives for risk mitigation. She said this could take the form of grant programs or insurance pricing incentives. The partnership with researchers at IBHS is giving state insurance

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regulators new insights into cost-effective pre-disaster mitigation and home hardening. Getting to more availability and affordability means bringing down the risks in state insurance regulators' jurisdictions. Director Wing-Heier stated that state insurance regulators are well-positioned to push for more mitigation funding and clear mitigation incentives.

The fifth resiliency action is to bring in the work that Commissioner Birrane has been leading in the Solvency Workstream. The workstream is finalizing recommendations for scenario analysis tools, which are a critical part of resilient insurance markets. As you know, one of our primary roles is to be strong financial regulators, reducing the likelihood of insolvencies. Scenario analysis will make state insurance regulators more informed and position them to understand how climate risks are impacting insurer solvency.

Director Wing-Heier said, in summary, that this forward-looking strategy will empower NAIC members to communicate and harmonize the important climate-related work the Task Force has been doing.

O'Connor said he has heard objections based on the lack of transparency. Director Wing-Heier said the document is an internal strategy for members; there is no requirement to seek public comment; and the document can be changed at any time because it is a living document. She said the document does not ask insurers for anything more than what they are already doing and is seen as a compilation of what the NAIC is doing on the subject through many different committee groups. Commissioner Stolfi said the strategy does not mandate committee groups to do anything, and there are no charges produced in the document. Numerous commissioners complimented the quality of the product and discussed whether an official exposure for public comment was needed.

Interested parties requested an opportunity to comment for many reasons, including that: 1) it is a public document; 2) there could be indirect, unintentional consequences; 3) some of the wording might need tweaking to better align with charges; 4) there is insufficient focus on the role of state and local government; 5) the document is not completely aligned with the International Association of Insurance Supervisors (IAIS) document on the topic; 6) consumers have an interest; 7) the effort to address the low penetration of flood insurance would involve major changes in the strategy; and 8) there is no strategy to address the failings of private reinsurance markets.

Upon interested party requests, Director Wing-Heier asked interested parties to submit any comments to her soon and before the document is considered for adoption by the Executive (EX) Committee, although she did not want that to delay adoption by the Task Force. Commissioner Lara asked for the strategy to be adopted to meet the timeline and said the plan is to continue open discussions and provide opportunities for comments as the document is updated and before it is considered for adoption by the Plenary. Commissioner Ommen said a direction could be to adopt the document now and then make further edits at Executive (EX) Committee meetings. Director Wing-Heier said she would expect to make changes throughout the year.

Commissioner Rude made a motion, seconded by Commissioner Kreidler, to adopt the NAIC Climate Resilience Strategy (Attachment Two). With one no-vote from Indiana and three abstentions from Arkansas, Florida, and Iowa, the motion passed.

### 5. Received a Status Report on the Solvency Workstream

With limited time for the remaining agenda items, Commissioner Birrane said it should be clear the plan is for the Task Force to make a referral to the Catastrophe Risk (E) Subgroup of the Property and Casualty Risk-Based Capital (E) Working Group, and she would provide a written summary. The written report on the Solvency Workstream is as follows: The Solvency Workstream of the Climate and Resiliency (EX) Task Force was tasked with considering the development of a climate scenario analysis. In 2022, the workstream held three public panels to learn more

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about the use of climate scenario analyses and different perspectives from various parties. Most noteworthy was the panel involving four insurance supervisors from other jurisdictions who described their approaches on this topic.

In 2023, the Solvency Workstream held three regulator-to-regulator educational meetings during which Workstream members learned more from NAIC staff and other parties about climate scenario analysis and from other regulators' approaches to the topic. One significant finding was that commercial catastrophe modelers have already developed "Climate Conditioned Catalog" versions of their models that reflect adjusted frequency and severity for certain time horizons (e.g., 2040 or 2050). While such conditioned catalogs are generally only available to companies for hurricane, wildfire, and flood, the first two perils are already included in the NAIC P/C RBC reporting framework. To that end, workstream members believe the NAIC should consider requiring insurers to disclose such information in the confidential RBC filings in the future to allow state insurance regulators to understand the quantitative impact of climate change. To accomplish this, the Solvency Workstream is not suggesting any change to the capital required on RBC but would choose to capture this information in the RBC process. Related to this, Solvency Workstream members have asked NAIC staff to prepare an RBC blanks proposal to be submitted to the Catastrophe Risk (E) Subgroup to consider for public exposure before Jan. 31. The Solvency Workstream will expose a draft memorandum to the Catastrophe Risk (E) Subgroup for comment. In addition to the RBC proposal, a small number of states will be asking some of their domestic companies to submit similar climate scenario analysis information to them in the next few months as a pilot.

Having no further business, the Climate and Resiliency (EX) Task Force adjourned.

SharePoint/NAIC Support Staff Hub/Member Meetings/EX Cte/CRTF/CRTF\_FNM\_Minutes 120323.docx

# INNOVATING FOR CLIMATE RISK

Challenges and opportunities facing the insurance ecosystem in its efforts to manage climate risks

**Francis Bouchard**  
Managing Director, Climate  
Marsh McLennan

Testimony before NAIC Climate and Resilience Working Group  
March 18, 2024



# Actors across the ecosystem have a role to play addressing increased climate risk

## 1. The Industry's traditional risk transfer role is being tested

- Risk signalling muted due to temporal mismatch, lack of incentives, high-risk growth, inflation and heightened risks
- Society-wide solutions suppressed by conflicting political perspectives

## 2. It's a complex ecosystem, particularly as it relates to climate adaptation

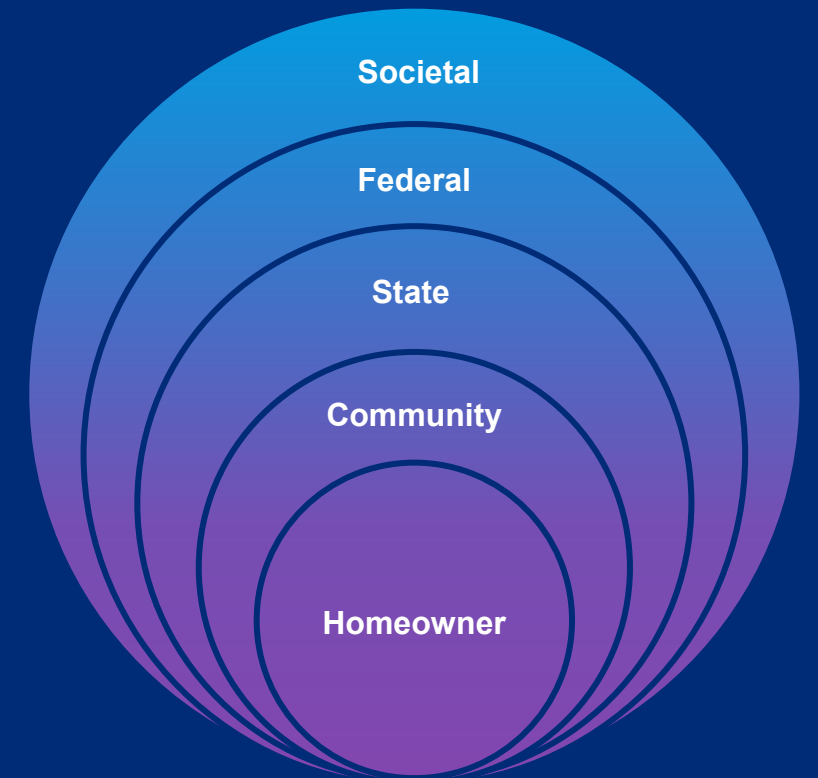
- Local risks require local solutions
- All levels of government involved
- Private capital absent clear returns
- Many view issue as long-term priority

## 3. Early innovations and partnerships are emerging

- Climate risks are rapidly evolving, creating opportunities to engage and drive impact
- New tools and opportunities for distribution, engagement and mitigation
- Lots to learn from developing world partnerships and product innovation

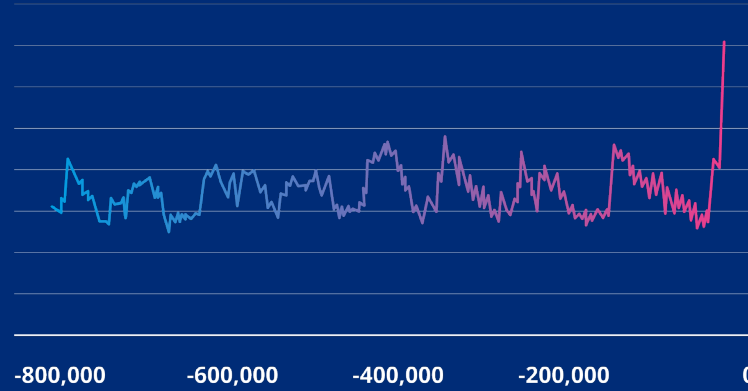
## 4. Five collective efforts to move the needle

- Equip communities to act
- Quantify the resilience dividend
- Incentivize private capital investment
- Ensure a risk-aware policy environment
- Institutionalize a build back better framework

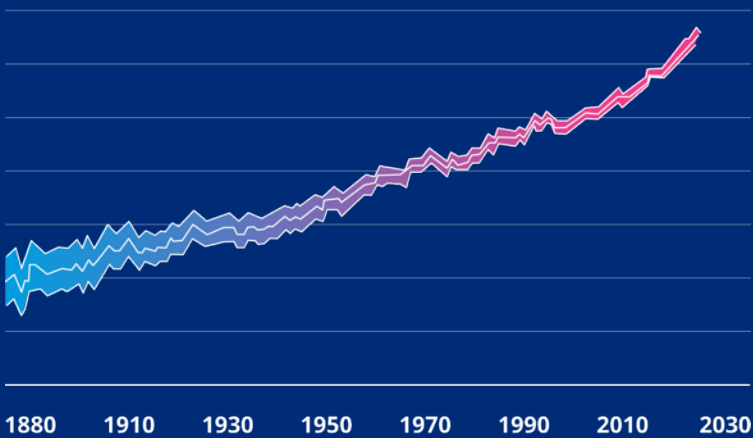


# Natural science trendlines show rising risks

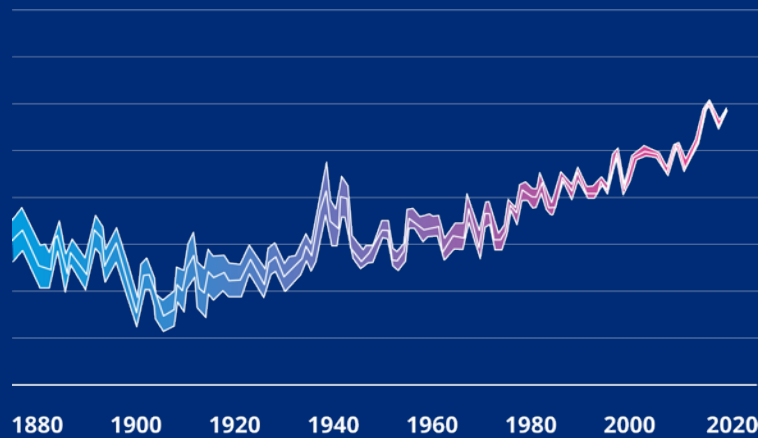
CO2 particulates (804,000 BCE to 2021 CE)



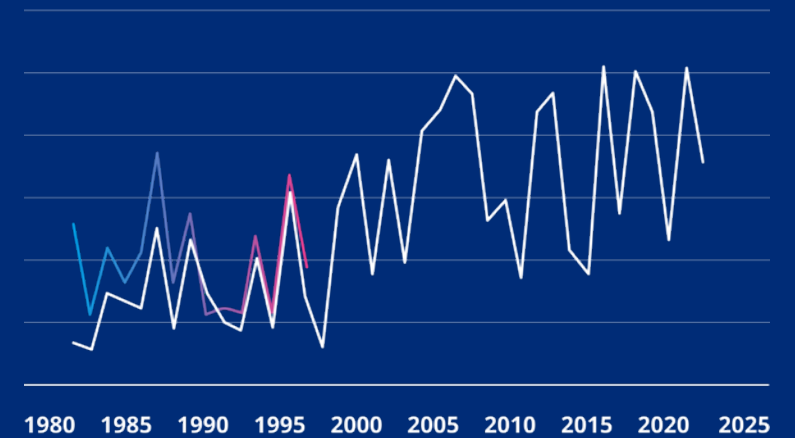
Global average absolute sea level change, 1880-2021



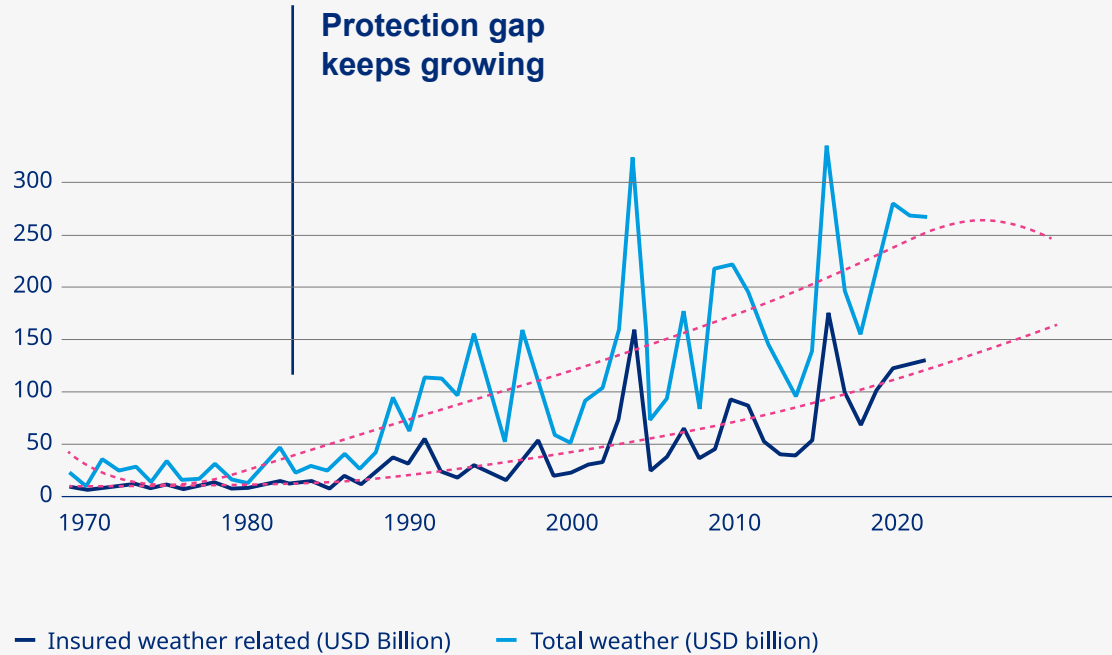
Average global sea surface temperature, 1880-2020



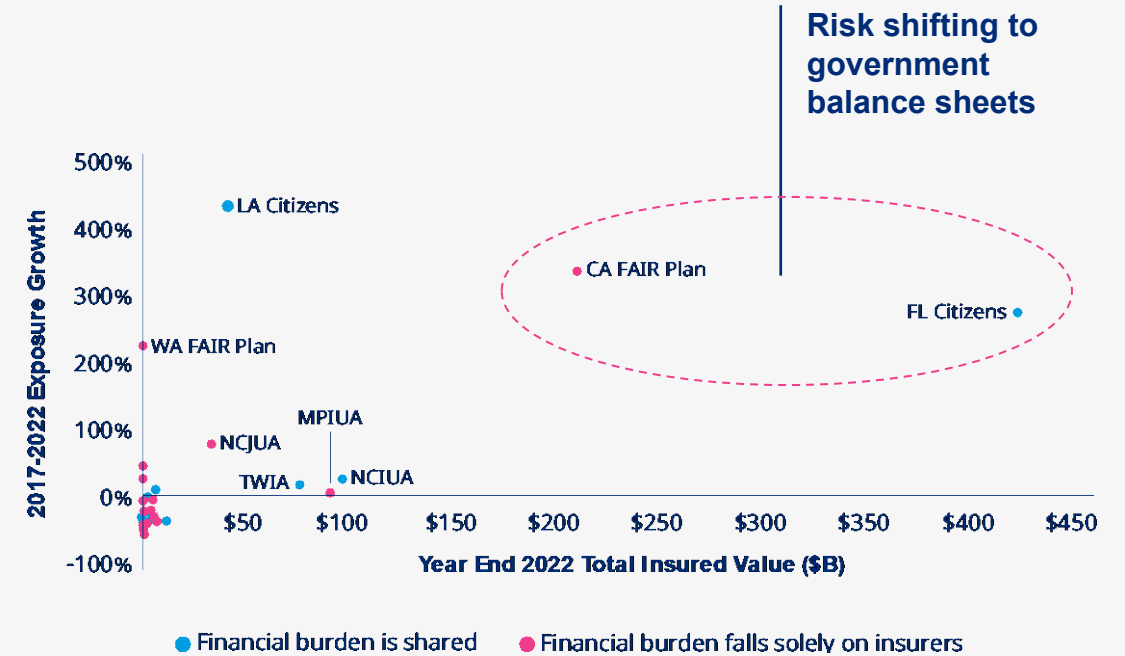
Wildfire extent in the United States, 1983-2021



# Economic trendlines show a growing gap and increasing government role



Source: Oliver Wyman analysis based on Swiss Re Institute's Sigma Explorer assumed 60% loss ratio



Source: Milliman report "A Survey of Residential Market Plan Assessment and Recoupment Mechanisms, November 2023"

# Insurance sector's signaling role is being tested

Incentives may be insufficient in face of long-term system-wide exposures

**Like the canary that detects unseen risks**, industry uses terms and conditions to send risk signals and incentivize individual behaviors.

The typical delivery method – a 12-month insurance contract – is becoming less effective in performing that social role on climate-related risks.

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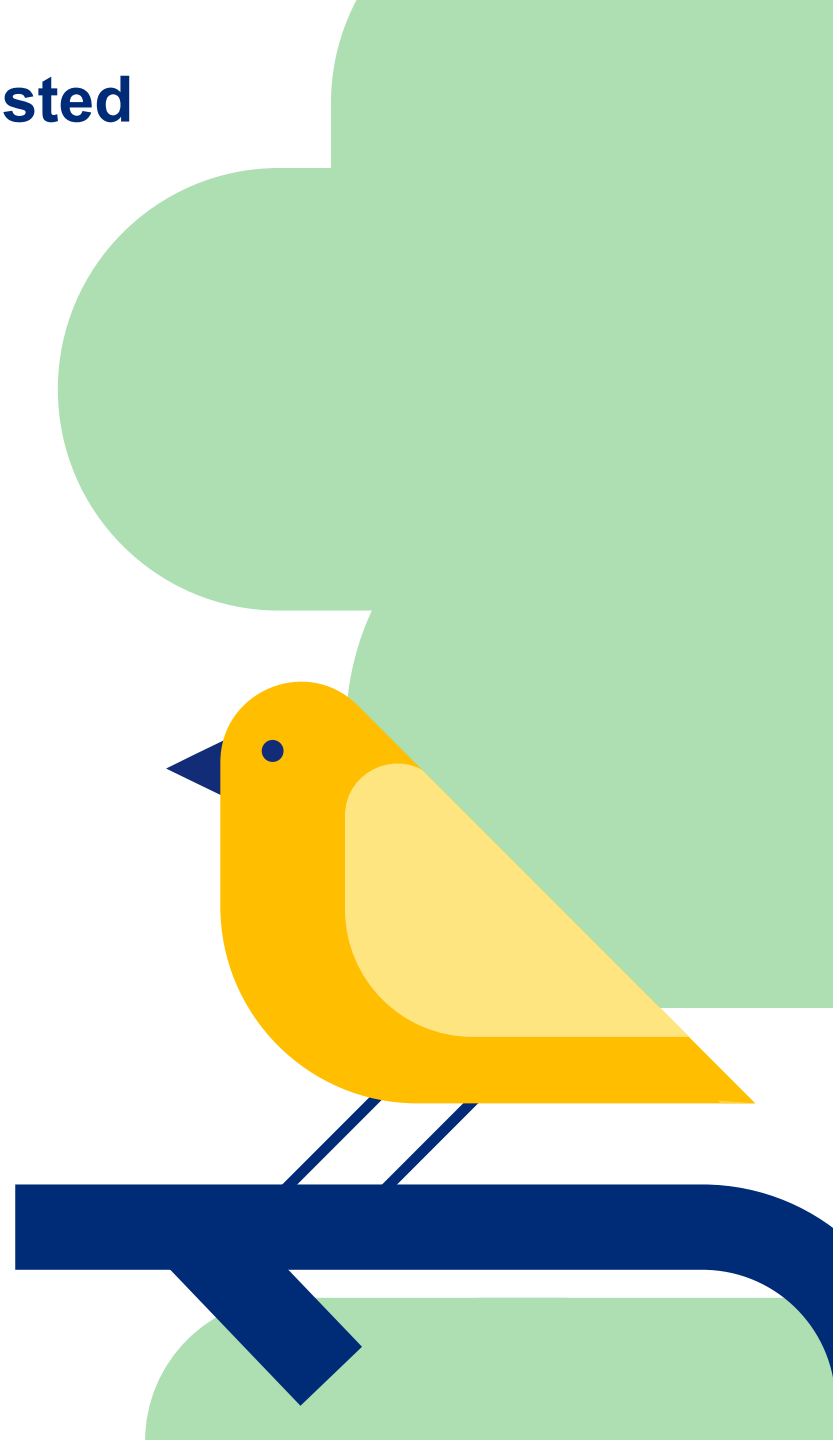
## Traditional Challenges

- Availability/affordability challenges as risks increase
- Claims inflation rising faster than CPI
- Development continues in high-risk geographies
- Extraneous litigation costs

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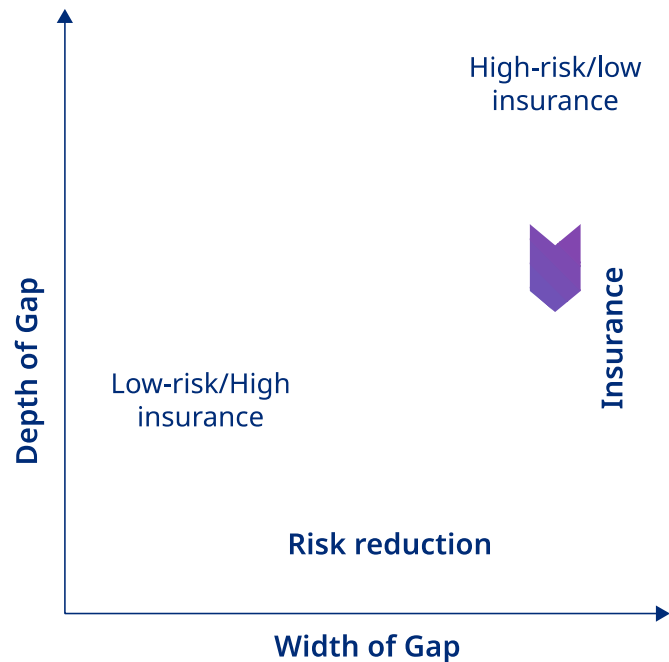
## Climate Challenges

- Long-term climate modeling evolving
- Climate risks evolve inconsistently: some fast, some slow
- Systemic nature of climate exposures transcends individual efforts
- Few other financial sectors signaling same risks



# Complex eco-system slows collective action and limits new funding sources

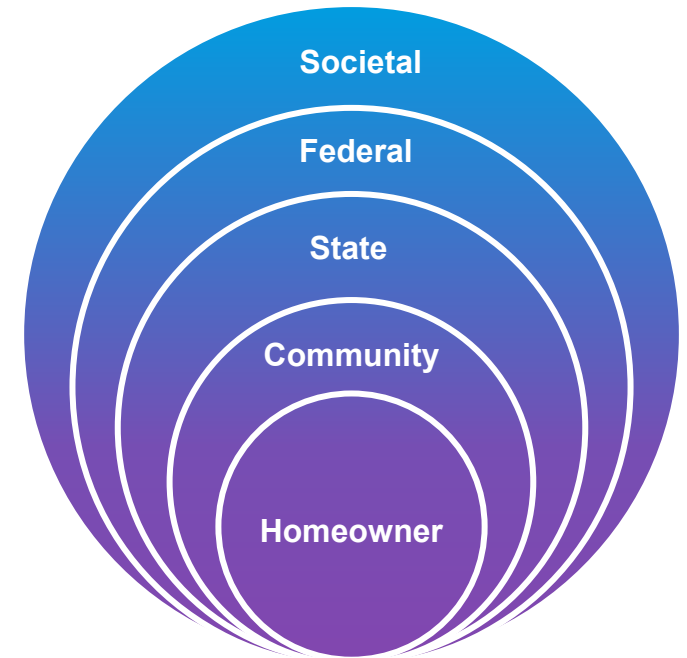
Two forms of resilience . . .



across six core assets . . .



and five systems



Matrix creates many options for system-level impact

# Global leaders rank climate and natural risks as significant long-term challenges

## Global risks ranked by severity over the short and long term

“Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period.”



Source: World Economic Forum Global Risks Perception Survey 2023-2024

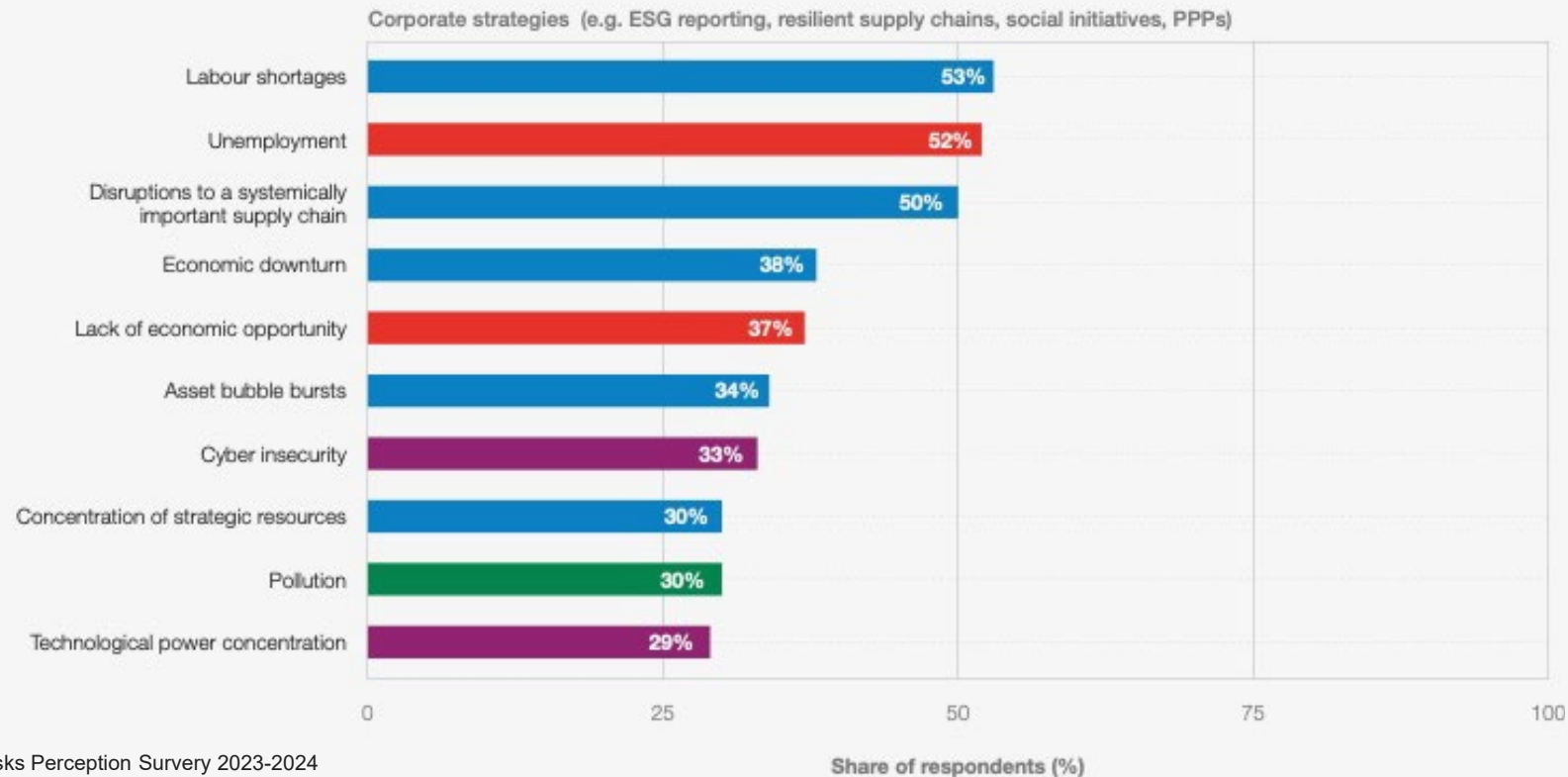
# However, global leaders do not envision corporate strategies having a long-term impact on climate risks

## Top global risks addressed by corporate strategies

“Which approach(es) do you expect to have the most potential for driving action on risk reduction and preparedness over the next 10 years?”

Risk categories

- Economic
- Environmental
- Geopolitical
- Societal
- Technological

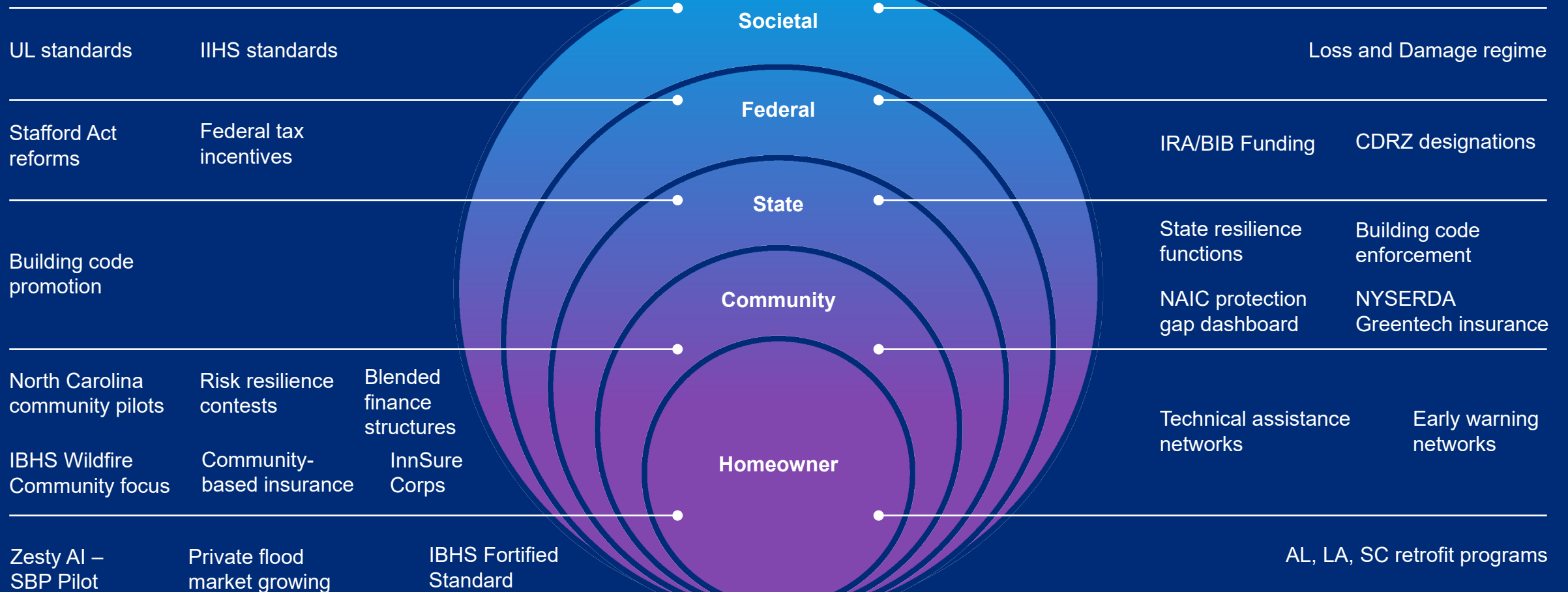


Source: World Economic Forum Global Risks Perception Survey 2023-2024

# Pilots, partnerships and best practices are emerging, but much more work is needed to scale impact

## Private sector efforts

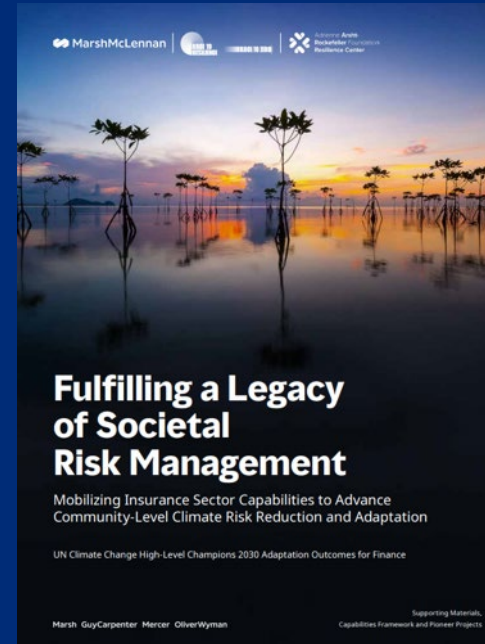
## Public sector efforts





# Marsh McLennan & UN reports illustrate emerging partnerships

COP Race to Resilience Reports feature over 50 projects tying insurance to climate risk reduction



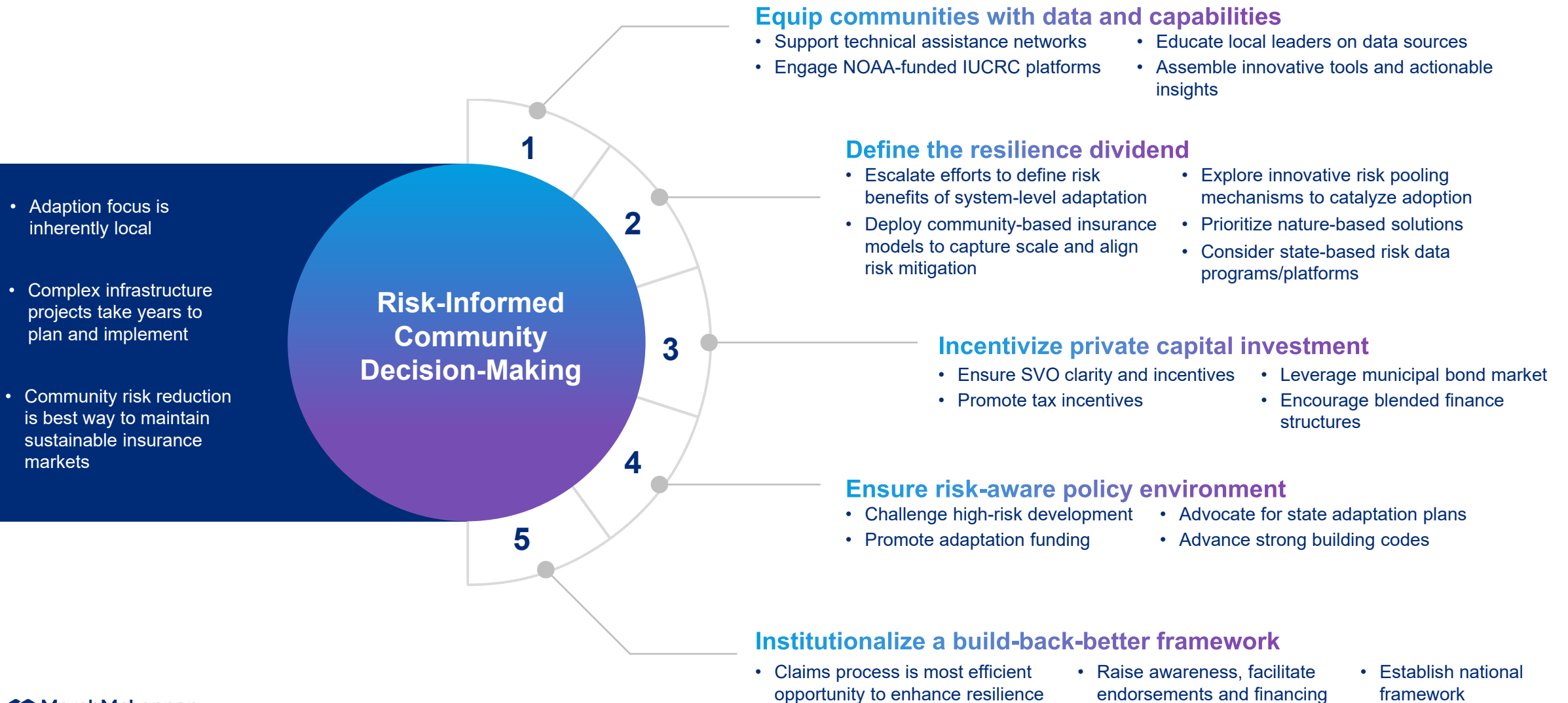
[https://www.marshmcLennan.com/content/dam/mmc-web/insights/publications/2022/november/Race%20to%20Resilience%20Report\\_COP27%20FINAL.pdf](https://www.marshmcLennan.com/content/dam/mmc-web/insights/publications/2022/november/Race%20to%20Resilience%20Report_COP27%20FINAL.pdf)



<https://www.marshmcLennan.com/insights/publications/2023/december/building-a-climate-resilient-future.html>

# Public and private sector collaboration is key to driving impact

Objective is to reduce climate vulnerability and exposure at the community level





**We are doing something for  
manufacturers and buyers and  
users and property owners  
everywhere . . . we are doing  
something for humanity.**

— William Henry Merrill, Jr.



# Thanks

**Francis Bouchard**  
Managing Director, Marsh McLennan

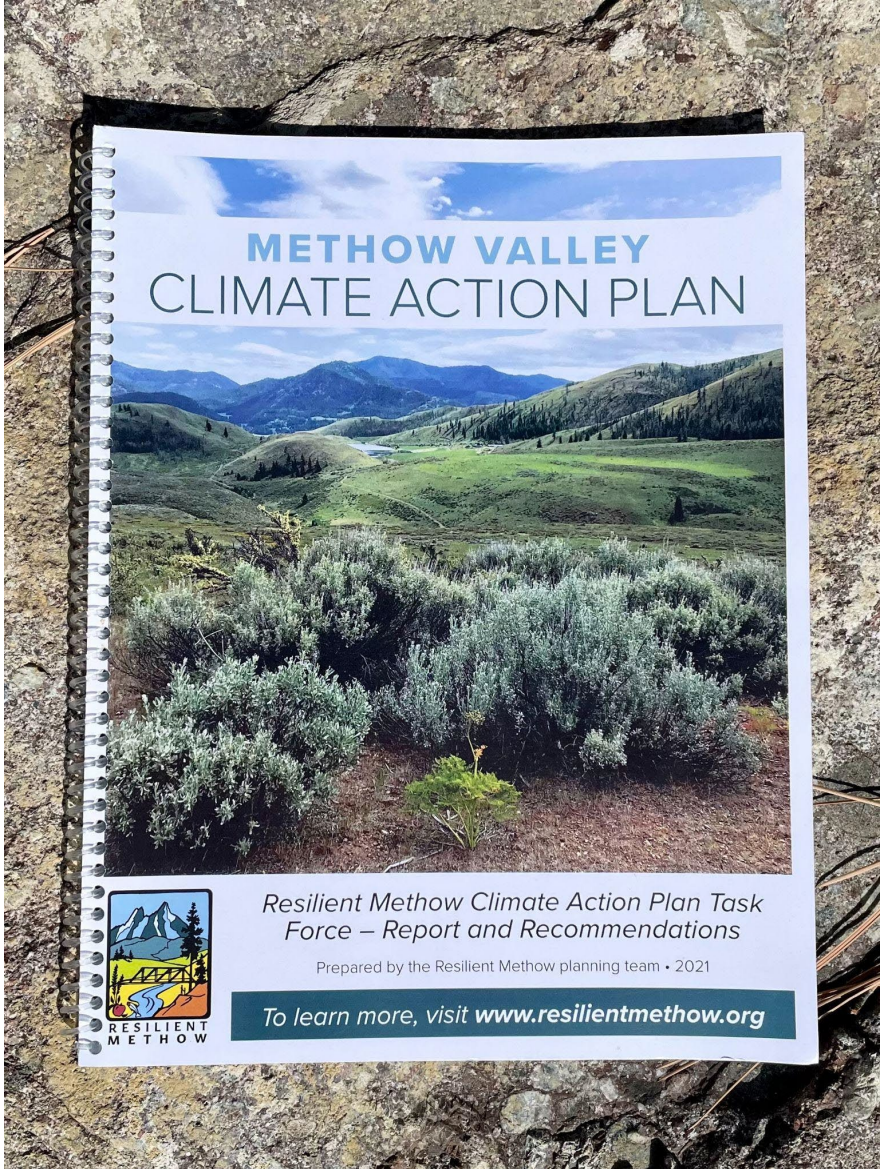
Cell: +1 (202) 779-2786  
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Resilient  
Methow  
Climate Action  
Plan

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RESILIENT  
METHOW



# METHOW VALLEY CLIMATE ACTION PLAN



*Resilient Methow Climate Action Plan Task  
Force – Report and Recommendations*


Prepared by the Resilient Methow planning team • 2021

To learn more, visit [www.resilientmethow.org](http://www.resilientmethow.org)

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**The Methow Valley Climate Action plan and Resilient Methow represent the culmination of four years of work, and reflect the involvement and contributions of hundreds of Methow residents, consultants, and representatives of local governments, tribes, community organizations, public agencies, and businesses.**





**The Climate Action Plan presents a vision and roadmap for the Methow community to prepare for the impacts of climate change, and to reduce local sources of greenhouse gas emissions. Grounded in science, and based on input from hundreds of community members and experts, the Climate Action Plan details realistic, practical strategies and actions our community and local governments can take to become resilient and carbon- neutral.**

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# The Methow Valley Watershed





The Inspiration for a Climate Action Plan: Carleton Complex Fire 2014



# Starting with the science - Expected Climate Impacts



## INCREASED RISK OF WILDFIRES

- Evacuations
- Loss of Life, Property
- Smoke
- Loss of Biodiversity
- Heat Stroke



## INCREASED SUMMER DROUGHT

- Heatwaves & Crop Stress
- Low Stream Flows
- Water Quality & Quantity
- Biodiversity



## EXTREME RAINFALL

- Flash Floods
- Erosion
- Crop Damage



## EARLIER RUN-OFF

- Seasonal Flooding

## WARMER WINTERS

- Less Snowpack

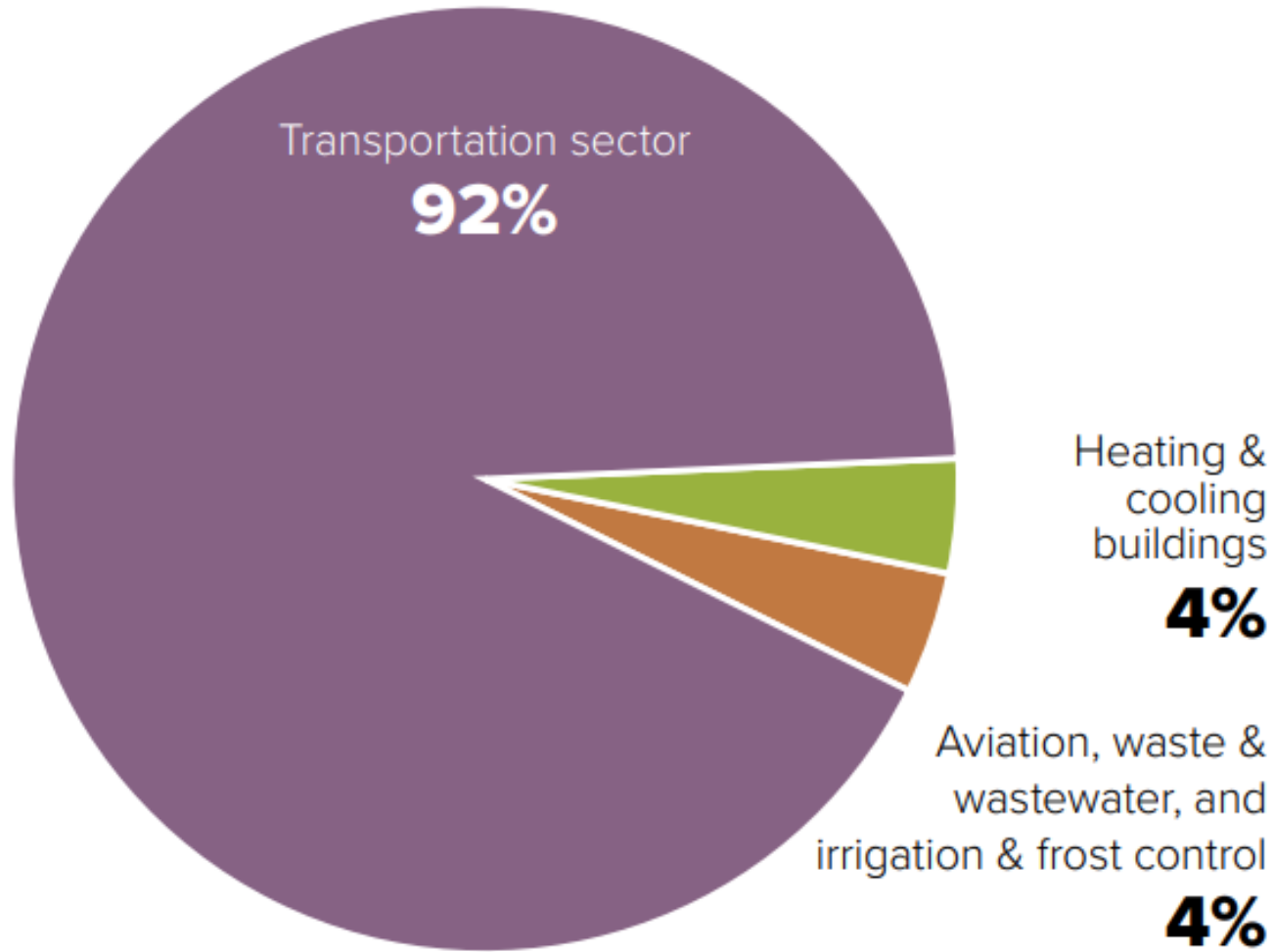


## EXTREME WEATHER DAYS

- Fire Risk
- Infrastructure Damage

Figure 3: Expected Climate Change Impacts on the Methow Valley: Secondary Implications

# EMISSIONS IN OUR COMMUNITY







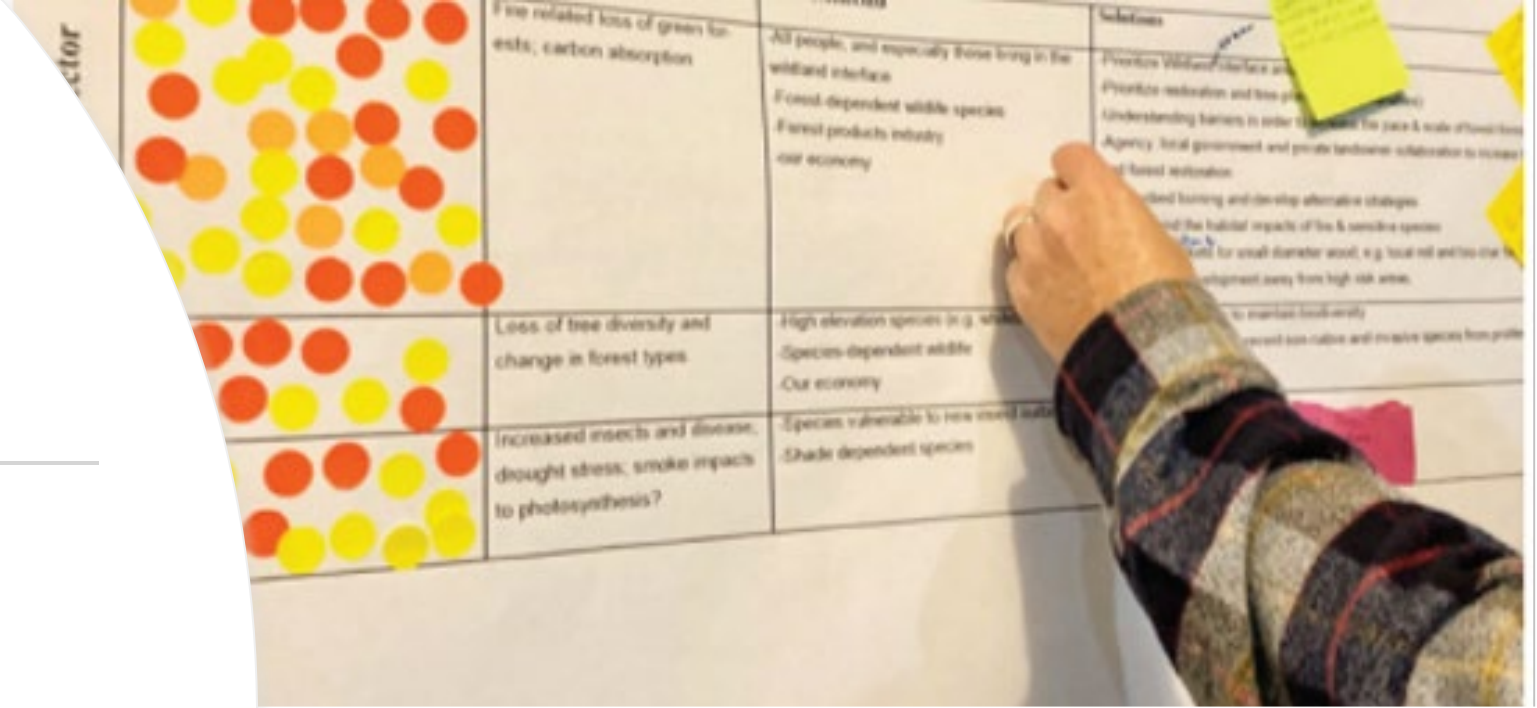
-  9.1 tons of carbon per person annually
-  92% of GHG emissions from personal transportation sector
-  27% of vehicle emissions are from tourist vehicles.
-  4% of emission from energy demands from buildings
- 2.7% waste/wastewater
- 1.3% other

Figure 2: Methow Valley Community GHG Emissions, 2019

# Creating the Plan

- Opening meeting with Dr. Amy Snover from University of Washington to share expected local climate impacts
- Climate Action Task Force convened with 60 **Methow residents, consultants, and representatives of local governments, tribes, community organizations, public agencies, and businesses**
- Sub groups were created to identify priorities and strategies in each area of the plan
- Reconvened a community meeting for people to share their priority actions – 100s of people participated in the process
- Plan was completed and published



# Climate Action Means:

## Mitigation:

Addressing the root cause (reducing greenhouse gas emissions)



## Adaptation or Resilience:

Preparing for climate impacts that are already happening

**Vision: A resilient, carbon-neutral future with equity for all**

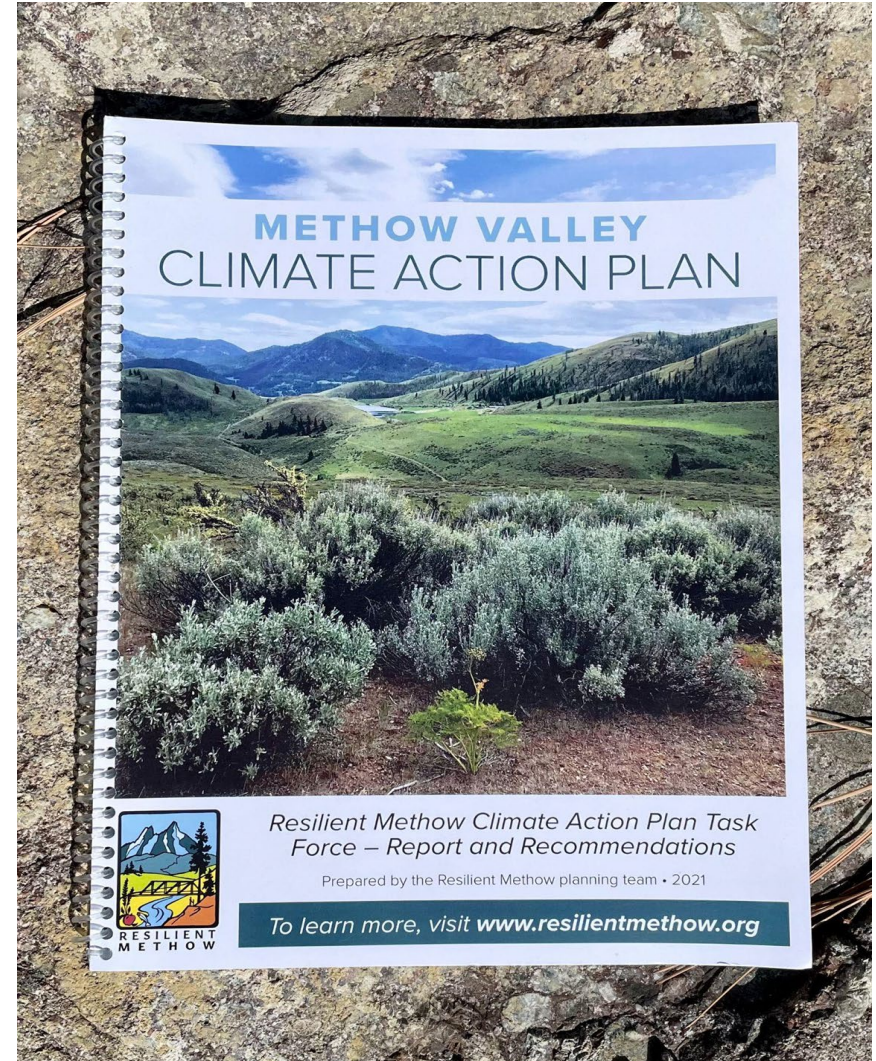
**Core values:**

- Human health and safety
- Sustainable livelihoods
- Affordable and sustainable built environment
- Healthy natural systems
- Well being of future generations
- Equity in all elements of the plan



# Climate Action Plan Goals for a Resilient Methow

1. Water to sustain nature and people.
2. Resilient, healthy, and abundant natural systems.
3. A community prepared and safe in the event of adversity.
4. A low-carbon, efficient, livable & resilient/affordable built environment.
5. A thriving place-based economy with equity for all.
6. A vibrant future for agriculture.
7. A carbon-neutral Methow Valley.





# Methow Valley Climate Action Plan



## EQUITY

- ACCESSIBLE TRANSPORTATION
- WEATHERIZATION OF HOMES - RENTALS & LOW INCOME
- INDOOR REC CENTER
- CHANGING WORKFORCE

## ECONOMY

- DIVERSIFY ECONOMY
- BROAD BAND
- COMMUNITY CONNECTIVITY
- EDUCATION TO BIZ & DRGS

## HEALTH

- CLEAN AIR FREE OF SMOKE
- SMOKE READY COMMUNITY
- PURPLE AIR SENSORS IN METHOW

## BUILT ENVIRONMENT

- CLIMATE MIGRATION
- TRANSPORTATION
- HOUSING COSTS INCREASING
- EFFICIENT USE OF CONSTRUCTION MATERIALS

## LAND & AG

- STRONG CONSERVATION ETHIC - ALREADY PREPARING FOR CHANGE
- BUILDING HEALTHY SOILS

SHOP LOCAL!



73% SURVEY SAID CLIMATE CHANGE IS #1 ISSUE IN THE METHOW

## WATER

- INCREASE WATER STORAGE
  - NATURAL STORAGE
- PROTECT WATER RESOURCE USE
  - CONSERVATION

## NATURAL SYSTEMS

- HABITAT - FOREST SHRUBLAND STREAMSIDE AQUATIC

BIODIVERSITY → CONSERVE WATER



ALREADY CHANGING → IRRIGATION → DROUGHT READY CROPS

## FARM RESILIENCY FUND

# CONSERVE WATER



# Resilient Methow Implementation Hub

- Distributed action
- Host quarterly forums and workshops on certain goals and strategies of the Climate Action Plan
- Track and communicate grant opportunities
- Support Grant writing to catalyze projects
- Communicate with non-profit and government partners who are implementing the CAP and catalyze additional projects that aren't yet happening



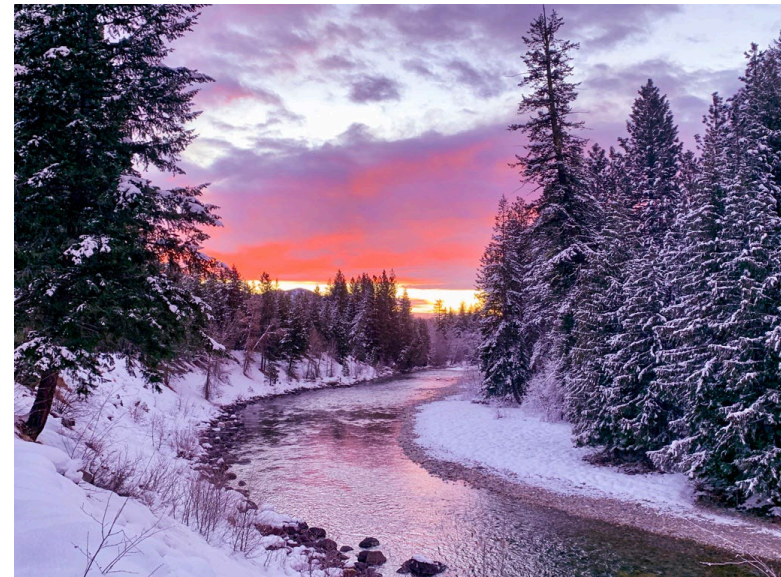
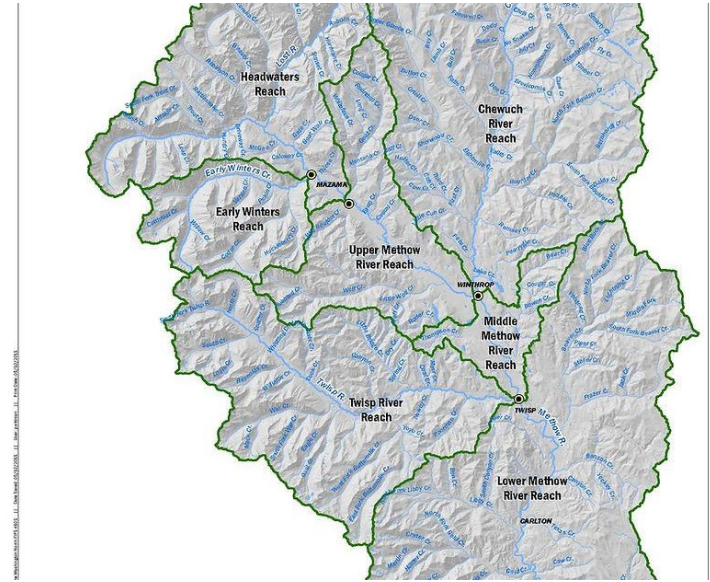


# Climate Action Plan Early Successes

A sampling of what has happened in the last year

# Goal 1: Water to sustain nature and people

- Efficiently use and conserve water by measuring single family well water use, updating the number that the county uses (Methow Watershed Council)
- Retain water rights in the valley through the creation of a local water bank (grant received by Okanogan Conservation District)
- New drought management plan underway.
- Researching drought resistant crops, and alternatives to Alfalfa that use less water.



## Goal 2: Resilient, healthy, and abundant Natural Systems

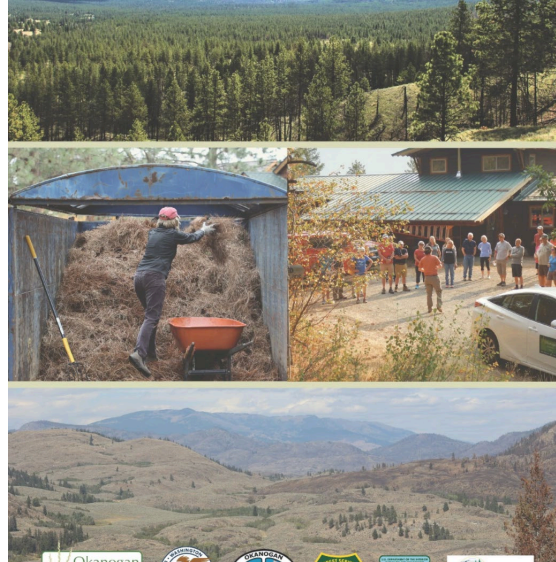
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- Public and private forest restoration projects through Forest Service, DNR, Conservation District that include thinning and prescribed fire.



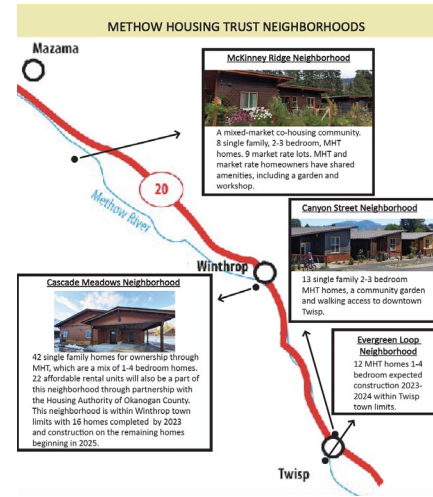
## Goal 3: A community prepared and safe

- Wildfire risk reduction: Community Wildfire Protection Plan update, neighborhood firewising, equitable mitigation program
- Smokeready community – air quality education, chipping events, air cleaner distribution to vulnerable populations.



## Goal 4: A low carbon, efficient livable and affordable built environment.

- Solar + Battery projects: Currently applying for grants from the state Department of Commerce for Twisp Town Hall and Okanogan County Electric Co-op to increase grid capacity, increase solar power generation, and improve resiliency during emergency situations.
- Partnership with Rewiring America
- Public building retrofit: Twisp Grange, Community Center, and Family Health Centers retrofits to increase energy efficiency and be clean air refuges during smoke events.
- Methow Housing Trust – Affordable Housing Expansion
- OCEC – Energy Efficiency Incentives





## Goal 5: Thriving Place-Based Economy with equity for all

- Circular economy project through Methow Recycles and Twispworks with grant from Dept of Commerce (identify non tourism or extraction based economy projects)
- Small Business Resiliency Fund to help with climate impacts
- Restoration economy development



## Goal 6: A Vibrant Future for Agriculture

- Methow Valley Foodshed – expands access to local food beyond farmers market. Collective marketing and purchasing. New refrigerated truck to expand operations.
- Conservation Agriculture Principles (from UW expert David Montgomery)
  - Minimal soil disturbance (i.e., minimal or no tilling)
  - Growing cover crops;
  - Devising crop rotations that work together as a system to build soil, sequester carbon, and use less water.



## Goal 7: A carbon-neutral Methow Valley.

- Electric School Bus Feasibility Study from Department of Ecology, including career and technical education for students.
- Grant to expand fast Electric Vehicle chargers in and out of the the Methow Valley.
- Public Transportation expansion through Trango.
- Partnership with Rewiring America to provide resources on incentives for home electrification.
- Compost and waste reduction expansion through Methow Recycles.



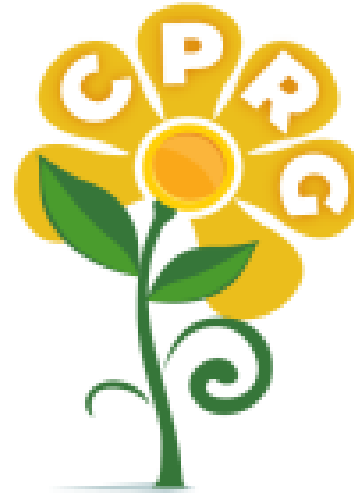
## Lessons From the Process:

- Involve local government from the beginning and engage them throughout.
- We were lucky to have expertise and support - lots more grant funding available now for climate planning.
- Develop a plan or model for ongoing implementation and collaboration.
- Dividing work and engagement by sector allowed for broad participation and involvement.
- Having the plan is a huge asset for accessing additional funding and grants.
- Mitigation and resilience matter



# Climate Pollution Reduction Planning Grants

- The [Climate Pollution Reduction Grants](#) (CPRG) program provides \$5 billion in grants to states, local governments, tribes, and territories to develop and implement ambitious plans for reducing greenhouse gas emissions and other harmful air pollution.
- Authorized the Inflation Reduction Act, this two-phase program provides \$250 million for noncompetitive planning grants, and approximately \$4.6 billion for competitive implementation grants.



**CLIMATE  
POLLUTION  
REDUCTION  
GRANTS**

[U.S. Environmental Protection Agency](#)

Thank you for  
having us! Any  
questions?

Please contact us with questions and ideas!

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