

Center for Corporate Climate Leadership

Climate Risk, Resilience, and Disclosure

September 30, 2021

Presented by:

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Today's Agenda

Introduction and Webinar Logistics

Speaker Introductions

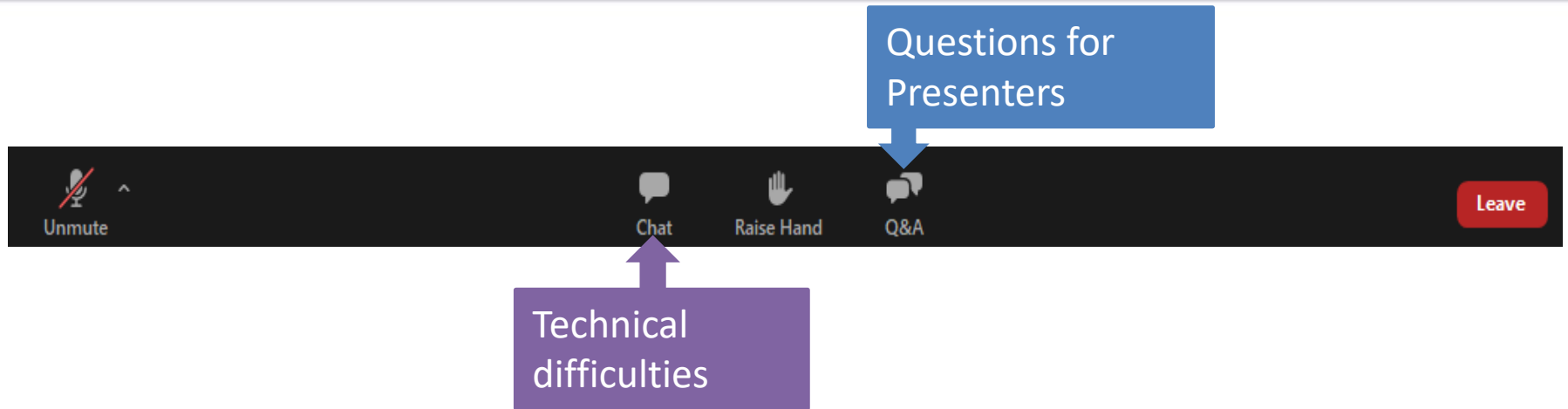
Topics

- Quick Poll
- About the Center
- Climate Risk and Disclosure Basics
- American Family Insurance
- PG&E

Q&A

Post-webinar Survey

Webinar Logistics



- **All attendees are muted** to minimize background noise.
- **Type your questions** in the Q&A box. We will take questions at the end of the webinar.
- If you are having **technical difficulties**, please send a message through the Chat to Hannah Stroud (Zoom Support) or email Hannah.Stroud@erg.com
- Today's presentation will be available at:
<https://www.epa.gov/climateleadership/center-corporate-climate-leadership-webinars-and-events>



First, a Few Questions

We'll start with a brief poll...

- 1) How familiar are you with the concept of climate risk? (Very/Little/None)
- 2) Has your organization taken steps to address climate risk? (Yes/No)
- 3) What stage is your organization in regarding climate-related disclosure? (Haven't thought about it, ad-hoc responses, actively engaged, other)
- 4) If applicable, what prompted you to disclose and address climate-related risks? (investor pressure, state/local government laws/policy, internal governance, other)



About the Center

The U.S. EPA Center for Corporate Climate Leadership serves as a comprehensive resource to help organizations of all sizes measure and manage greenhouse gas (GHG) emissions.

- Provides technical tools, ground-tested guidance, educational resources, and opportunities for information sharing and peer exchange. Promote practices that reduce GHG emissions.
- Co-sponsors the Climate Leadership Conference & Awards with TCR & C2ES. 10th Annual event (virtual): October 13-15, 2021.

<https://www.epa.gov/climateleadership>



Climate Risk and the Center

Key aspect to understanding corporate climate risk is for organizations to measure and disclose their emissions impacts.

Center provides resources to credibly **measure**, **disclose**, and **reduce** GHG emissions.

Center for Corporate Climate Leadership Resources

Greenhouse Gas Inventory Guidance, Development Process,
Management Plan

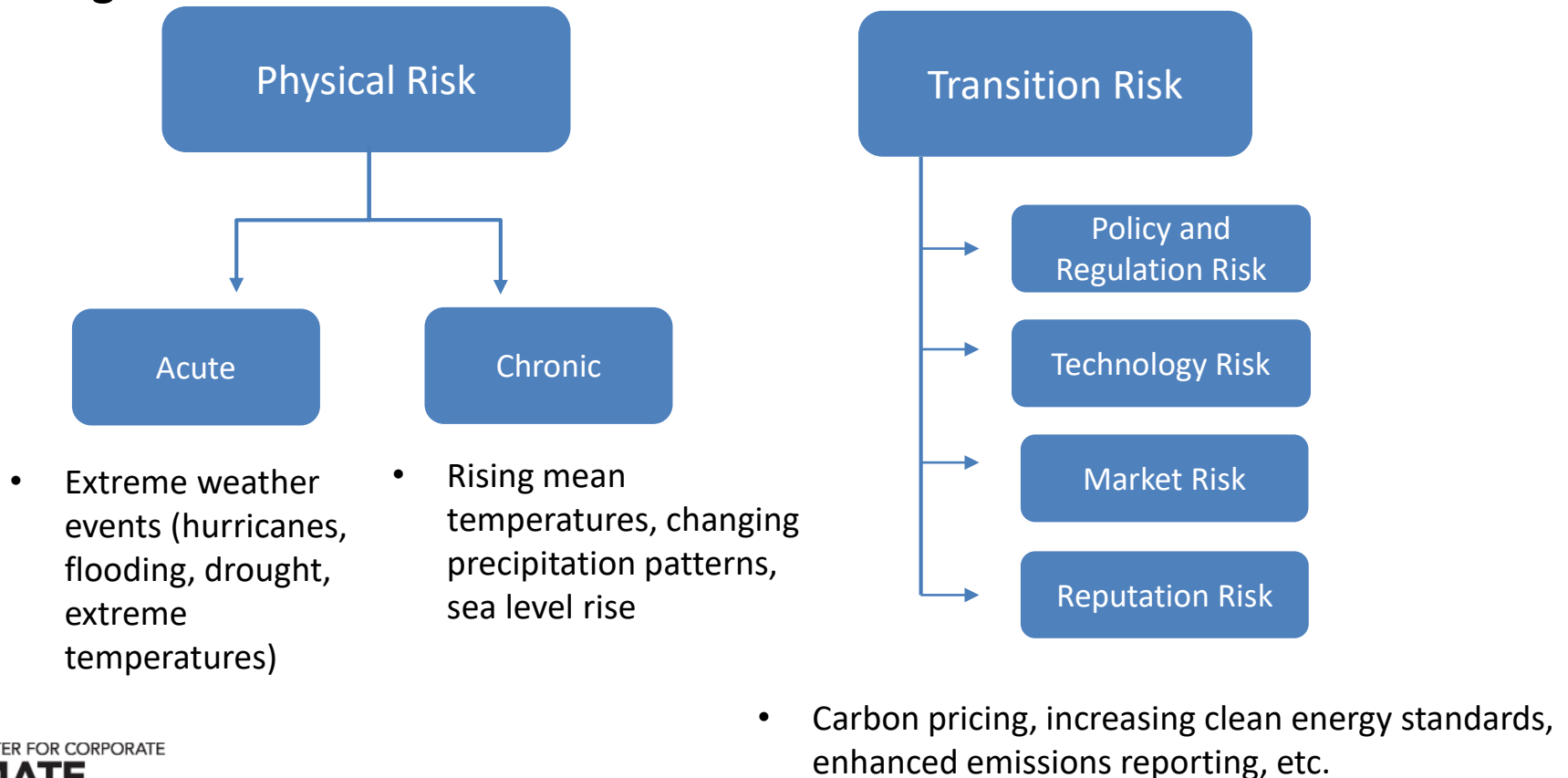
Greenhouse Gas Measurement Resources (Emission Factors, GHG
Calculators)

Target Setting and Supply Chain Guidance

Conduit to Greenhouse Gas Reduction Programs and Strategies

What is Climate Risk?

The current and future potential impacts to organizations from climate change



Who is Impacted by Climate Risk?

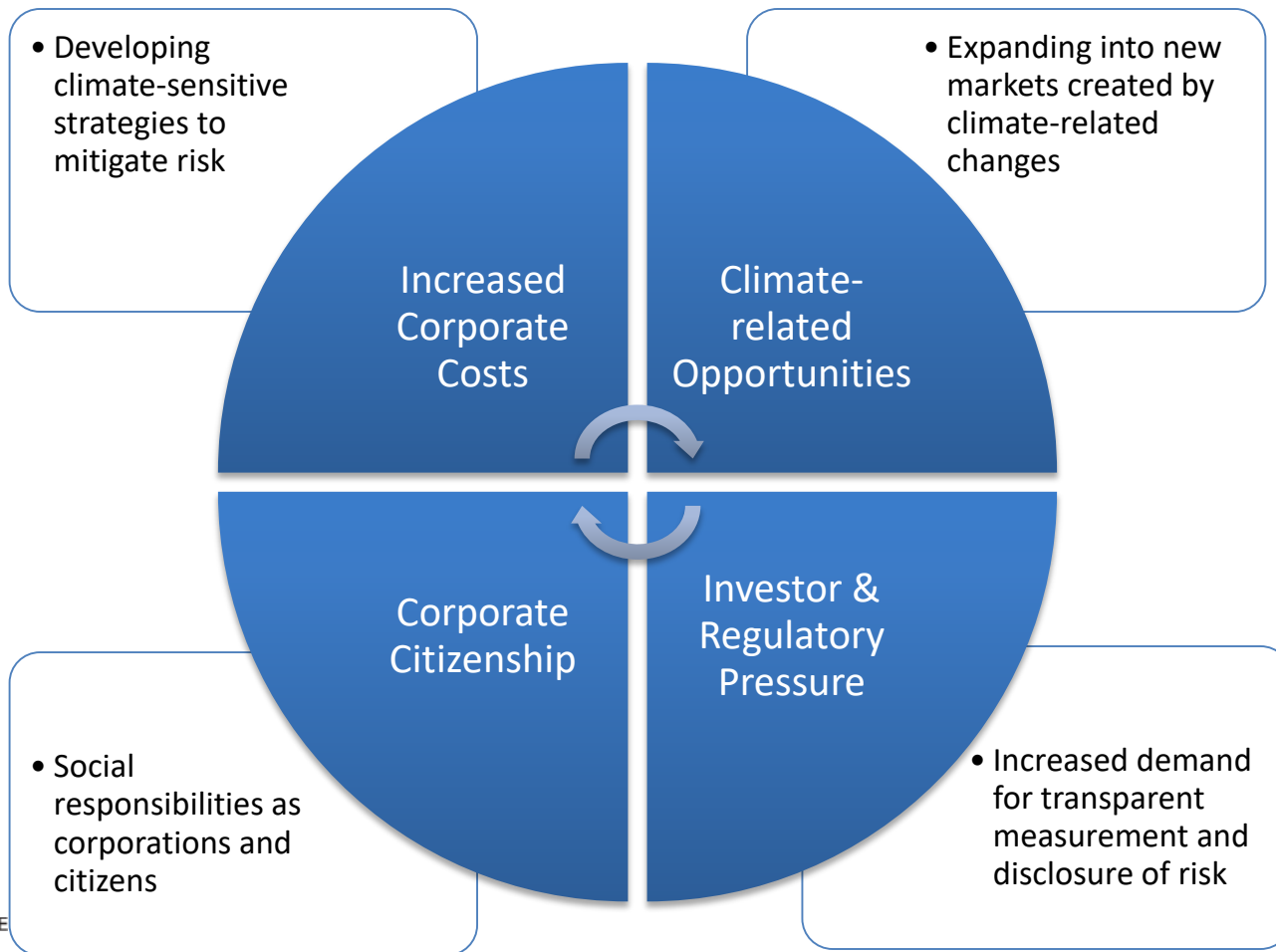
- **Most economic sectors and industries are affected by climate risk**
- **Physical**
 - Long-lived, fixed assets
 - Locations or operations sensitive to climate
 - Heavily reliant on water availability,
 - Supply chain subject to physical risk
- **Transition**
 - Dependent on carbon intensive energy
 - Face potential restrictions or higher costs

Figure 1. Ubiquity of Climate-Related Financial Risk

| Type of Risk | # of Industries | % by Market Cap* | Total Market Cap* |
|-------------------------|-----------------|------------------|-------------------|
| Physical Risk | 36 of 77 | 55% | US\$28.2T |
| Transition Risk | 57 of 77 | 85% | US\$43.4T |
| Regulatory Risk | 40 of 77 | 29% | US\$14.7T |
| Any Climate Risk | 68 of 77 | 89% | US\$45.1T |

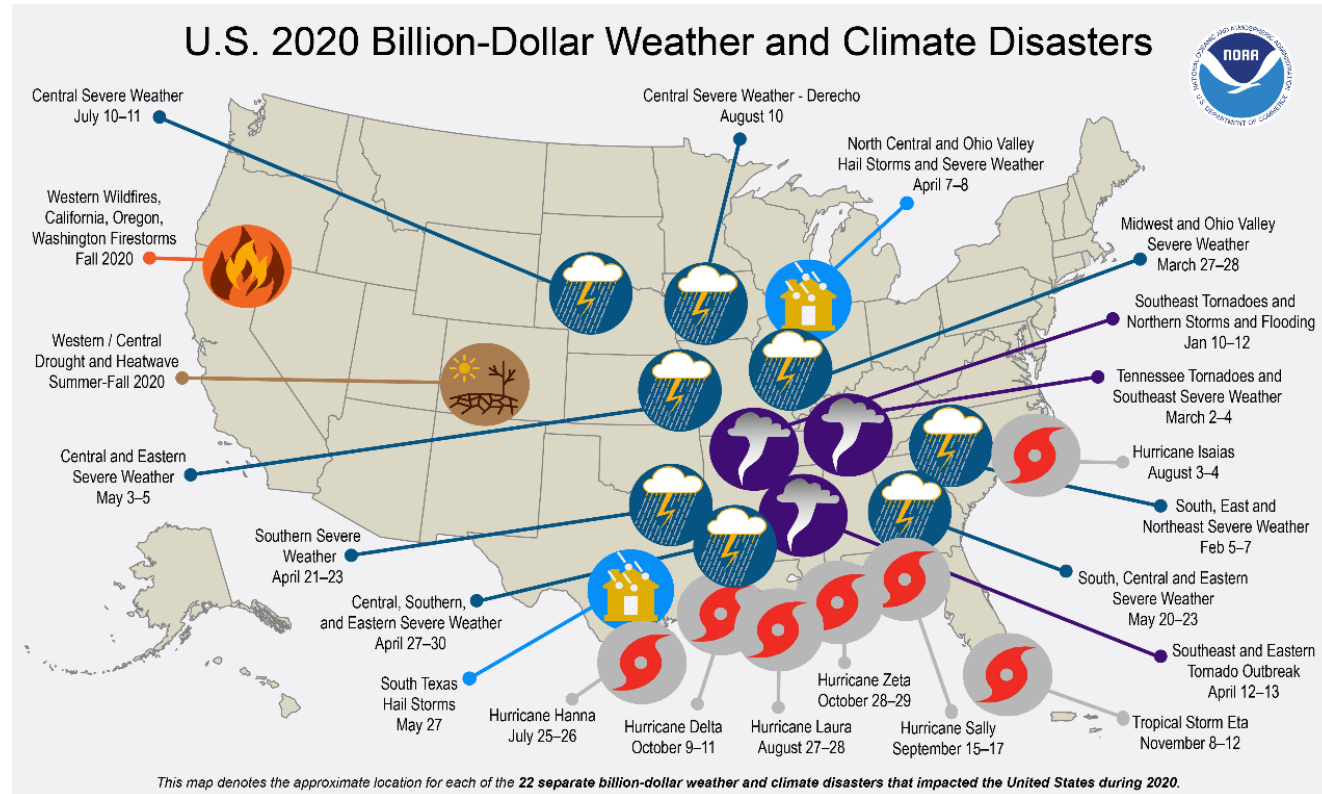
* Represents market capitalization of S&P Global 1200 companies reasonably likely to be exposed to each risk type.

Why does Climate Risk Matter?

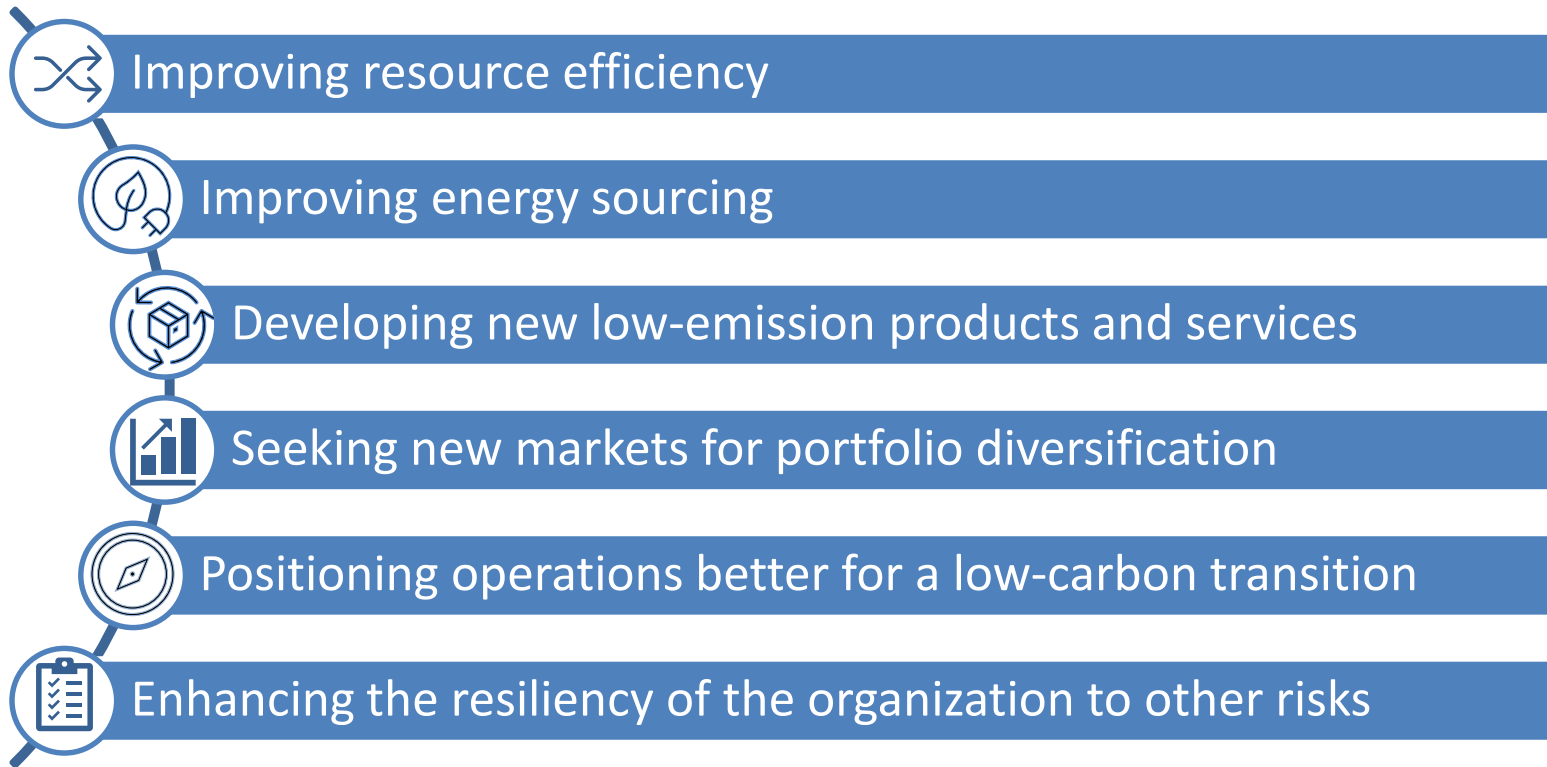


Increased Corporate Costs

- In 2020, the U.S. experienced 22 separate billion-dollar weather and climate disasters valued at **\$95 billion** in damages
- Costs associated with the transition to a lower-carbon economy is estimated to require **\$1 trillion** of investments per year



Climate-related Opportunities



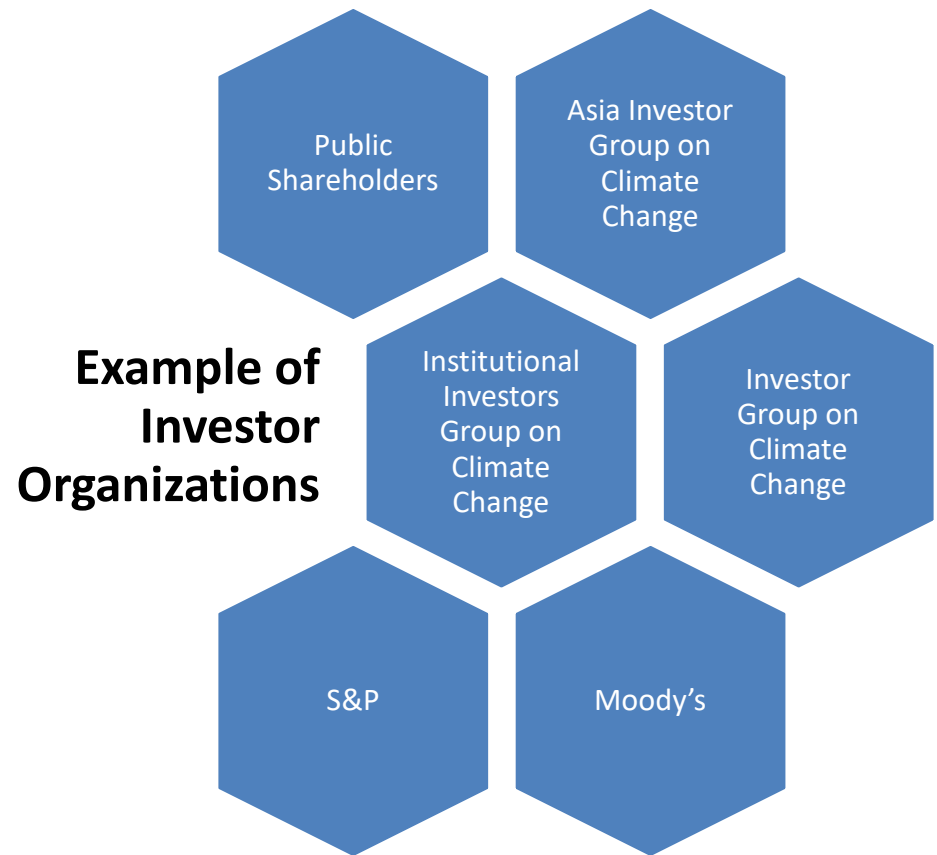
Integrating Climate Risk

Reporting Frameworks



Investor & Regulatory Pressure: Next Steps in the U.S.

- Companies controlling **\$138 trillion** in assets announce support for TCFD's recommendations
- 130 investors representing over **\$13 trillion** wrote to the G20 to encourage TCFD recommendation use





Investor & Regulatory Pressure: Next Steps in the U.S.

- Shareholders, credit rating agencies, insurance companies and private equity firms are increasingly pressuring companies to measure and disclose their climate risks, as these can translate into material financial impacts for investors.
- Several rating agencies now factor climate risks into their credit ratings.
- Central banks such as the **U.S. Federal Reserve and the SEC** have initiated steps to fill the data gap to better evaluate climate change impacts on corporations.
 - SEC has started a process to evaluate disclosure with the objective of facilitating the disclosure of consistent, comparable, and reliable information on climate change.
 - SEC is drafting proposed regulations that would mandate enhanced climate-related and other ESG disclosures.
- In May, **The White House** issued an Executive Order on climate-related financial risk.

Corporate Citizenship

- **Corporate citizenship** is the concept of organizations placing the interests of society on the same level as their bottom lines
- **Climate risk** can contribute to **corporate citizenship**



Climate Action

Insurance Leadership in Climate Risk & Resilience

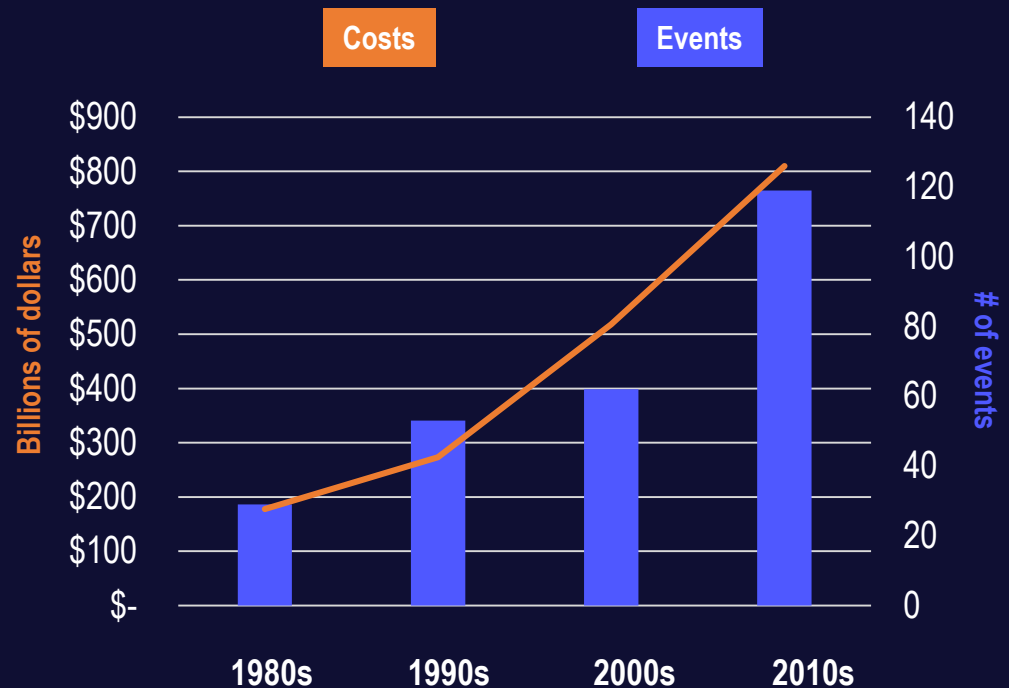
US EPA Center for Corporate Climate Leadership | September 30, 2021



Billion Dollar Disaster Events Increasing

- The U.S. experienced more than twice the number of billion-dollar disasters during the 2010s than the 2000s decade.
- Four of the five most costly U.S. billion-dollar disasters occurred in the 2010s (i.e., Hurricanes Harvey, Irma, Maria, and Sandy).
- The two most destructive and costly wildfire seasons in U.S. history have taken place over the last three years, with losses exceeding \$40 billion, with much of this damage in California.
- In 2020 there were 22 weather/climate disaster events with losses exceeding \$1 billion each to affect the United States – a record.

Number of Billion Dollar Disasters and Associated Costs



Source: NOAA

Evolution from Sustainability to ESG and Climate Risk

Environmental, Social, and Corporate Governance (ESG) principles are being increasingly used by investors, regulators and government entities to evaluate the responsible and ethical behavior, sustainability and societal impact of company actions – these models are used in assessing a company's potential future performance and long-term market viability.



Pressure to Act on ESG and Climate-related Risk

1. **Global:** Climate risk reporting/disclosure becomes mandatory for some large companies around the world. G7 push for mandatory climate risk disclosures planned for U.N. Climate Change Conference in Glasgow – November 2021. EU Sustainable Finance Disclosure Regulation (SFDR).
2. **US Federal:** US CTFC, Federal Reserve, and SEC all increase focus on climate-related financial risk and financial stability (among others). President Biden EO on Climate-related Financial Risk. US Treasury and FIO RFI on climate-related financial risk and disclosures.
3. **State:** New York DFS issues Insurance Circular (2020) establishing expectations of the insurance industry in managing the financial risks from climate change. Proposed NY DFS guidance to insurers released for public comment. CA, WA encourage TCFD reporting on annual NAIC Risk Survey. CA Climate Insurance Working Group Report.
4. **Industry:** APCIA, NAMIC, IBHS all develop environmental and climate risk principles/guidelines. NAIC continues focus on climate risk.

Climate Risk Scenarios

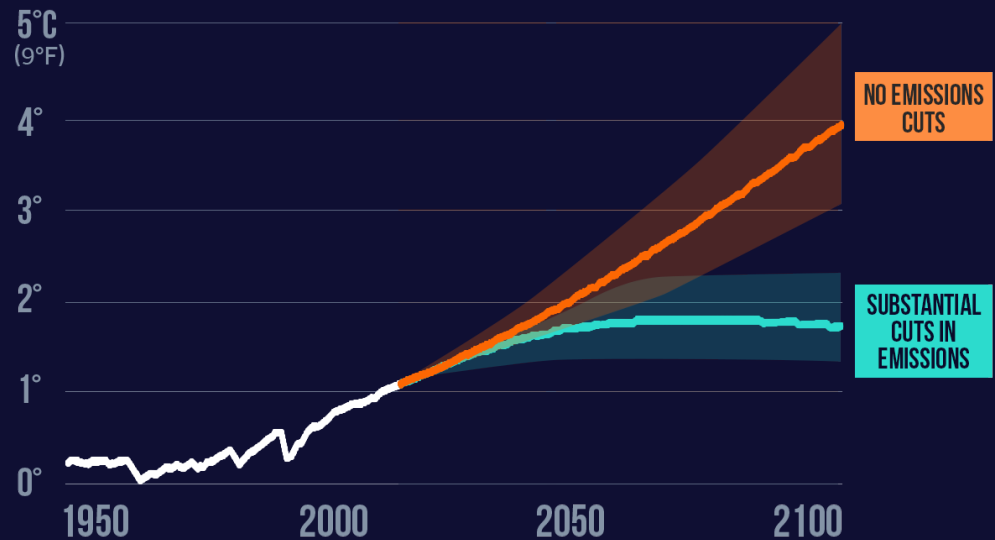
Representative Concentration Pathways (RCPs)

Shared Socioeconomic Pathways (SSPs)

Network for Greening the Financial System (NGFS)

FUTURE TEMPERATURES

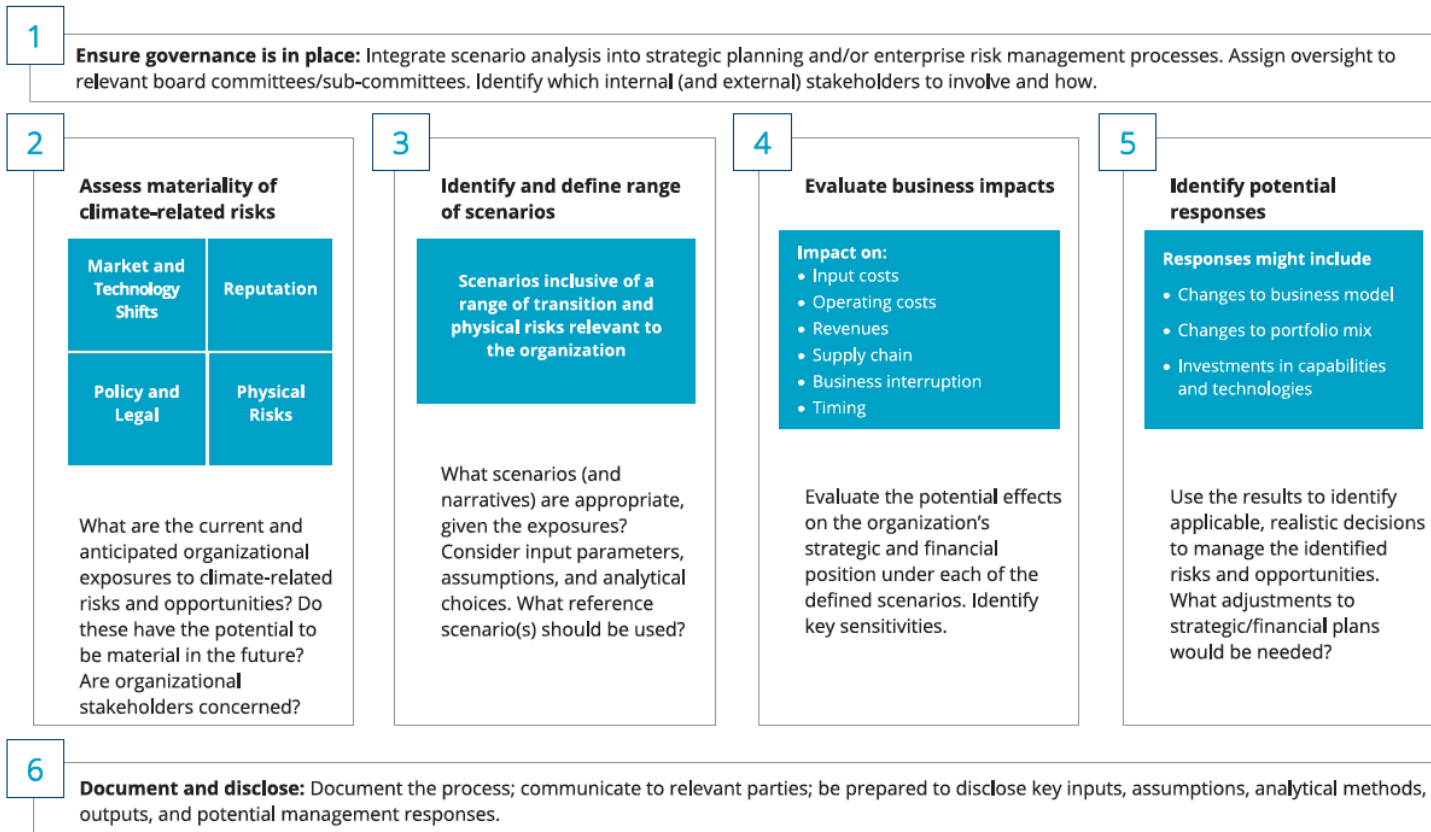
WARMING DEPENDS ON CHOICES TODAY



Global surface temperature (°C) anomaly relative to 1850-1900
High warming scenario: SSP3-7, Low warming scenario from SSP1-2.6.
Source: IPCC AR6 WG1

CLIMATE CENTRAL

TCFD Framework: Assessment and Scenario Analysis



Action at American Family Insurance

1. **Sustainability:** (Land, Waste, Water, Energy)
2. **Corporate Responsibility:** (Community, Environment & People)
3. **Social Impact:** (Strategic Partnerships and VC Investments)
4. **Corporate Advocacy:** (Public Policy)
5. **Climate Resilience:** Climate Risk (Financial Stability) and Community Resilience (Adaptation)



Thank You



Climate Risk, Resilience, and Disclosure

September 30, 2021



Together, Building
a Better California



About PG&E

PG&E is focused on providing safe, reliable, affordable, and clean energy to nearly 16 million Californians.



24,000
employees

5.5 million
electric customers

~85%
greenhouse gas-free
electricity

125,000
Circuit miles of
lines

70,000
square mile
service area

4.5 million
gas distribution
customers

~7,700
MW of owned electric
generation capacity

49,800
Miles of gas
pipeline

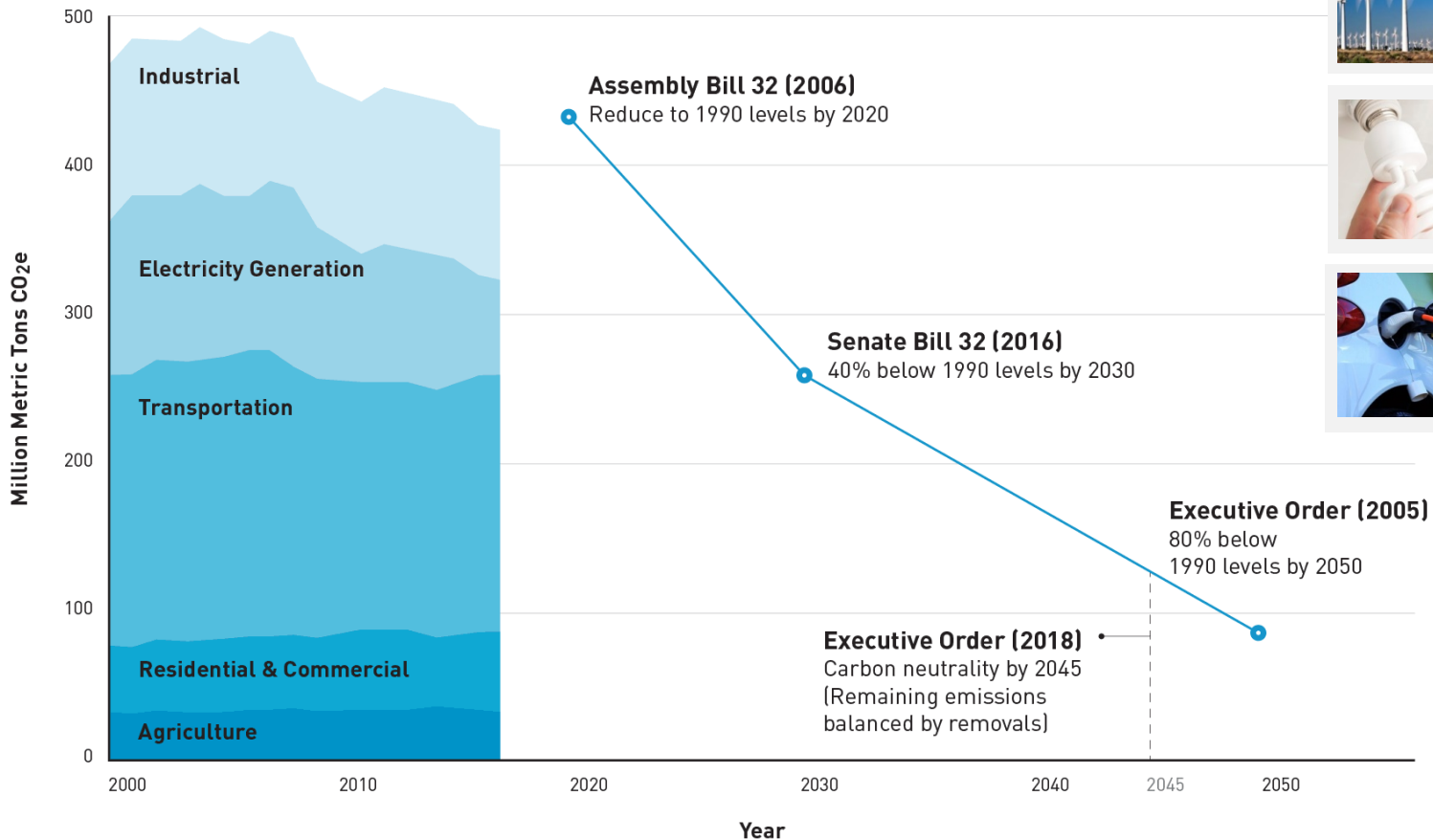
We approach our work through the “**triple bottom line**” framework of serving people, the planet, and California’s prosperity—underscored by strong operational performance.





California's 2045 Carbon Neutrality Goal

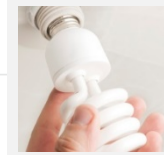
Executive Order B-55-18 established a statewide goal to achieve **economy-wide carbon neutrality by 2045** and to maintain net negative emissions thereafter.



California Is Targeting:



60%
renewables by
2030



2X
energy efficiency
in existing
buildings by
2030



5 million
zero emission
vehicles on the
road by 2030



Focused on Reducing Emissions

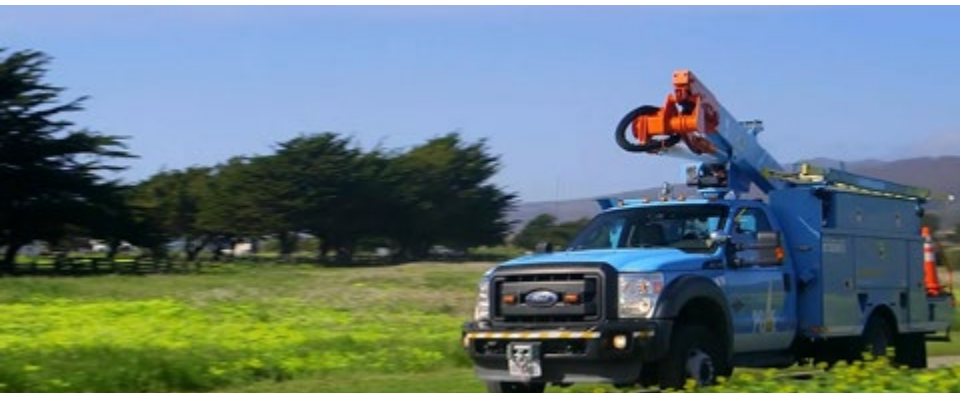
At PG&E, we embrace our foundational role in achieving California's goal of carbon neutrality and transitioning the state to a decarbonized and more climate-resilient economy in a way that leaves no one behind.

Reducing our own carbon footprint:

- Energy-efficient and sustainable facilities
- Cleaner vehicle fleet
- Methane emissions from natural gas operations
- Sulfur hexafluoride emissions from electric operations
- Environmentally responsible products and services

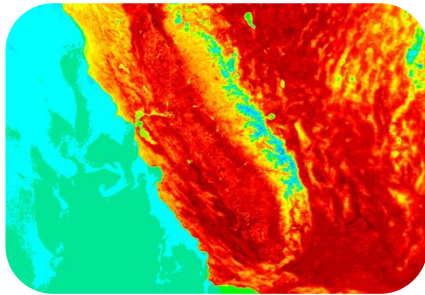
Enabling our customers to reduce their carbon footprint:

- Delivering cleaner energy and integrating energy storage
- Engaging customers through programs for:
 - Energy efficiency
 - Demand response
 - Distributed generation and storage
 - Electric vehicle adoption



PG&E is Exposed to Various Climate-Driven Hazards

PG&E's infrastructure, operations, and services span Northern and Central California and face a variety of risks driven by a changing climate.



Extreme Heat



**Extreme
Precipitation**



Sea-Level Rise



**Extreme Wildfire
Risk**



Drought

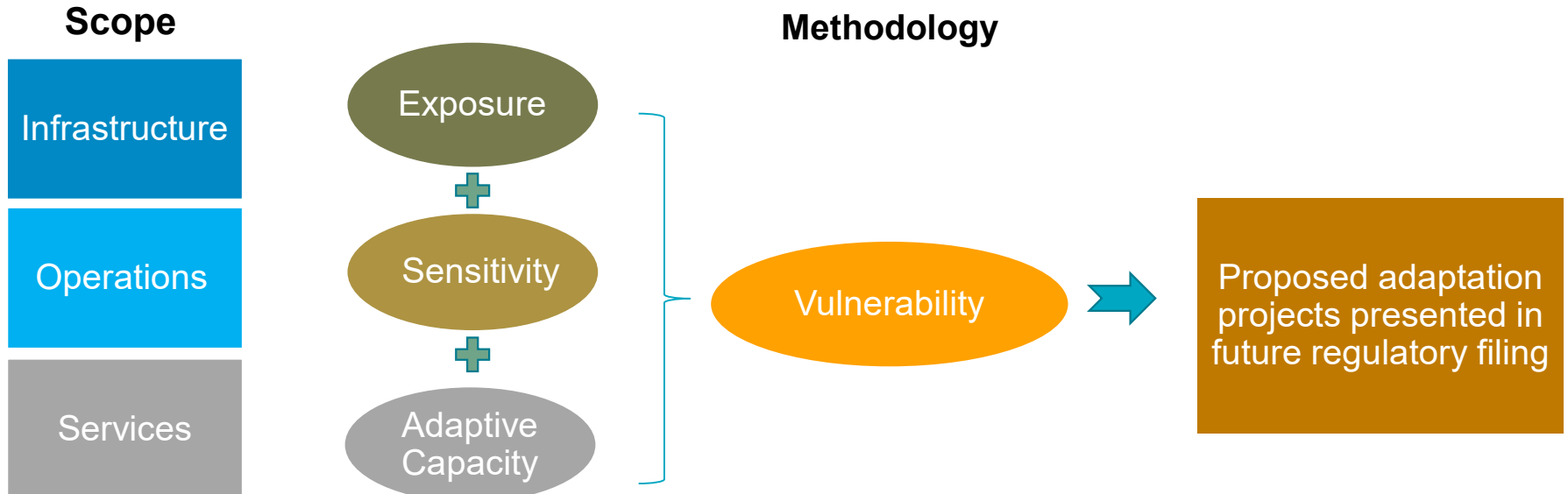


Subsidence

Multi-Year Climate Vulnerability Assessment

- Adapting to a changing climate involves **understanding the impacts of climate change** on our business, coworkers, customers, and the communities we serve.
- PG&E is conducting a multi-year, service area-wide **climate change vulnerability assessment** using the best-available climate projections for California.
- PG&E will engage with **disadvantaged and vulnerable communities** throughout this process, so that proposed adaptation options include the perspectives of the communities we serve.

Multi-Year Climate Vulnerability Assessment





Importance of Transparency and Disclosure

For PG&E, our public disclosure on climate risks and opportunities has been a journey—and an area we approach with a continuous improvement mindset.

Climate Change Topic Areas:

- Governance
- Risks and opportunities
- Strategy
- Emissions, goals and targets

The screenshot shows the cover page of the 2021 Corporate Sustainability Report. At the top, it features the PG&E logo, navigation links for Sustainability, Performance, People, Planet, California's Prosperity, ESG Indexes, and More, and a 'COVID-19 Response' link. The year '2021' is prominently displayed above the title 'Corporate Sustainability Report'. The main image is a landscape with solar panels in the foreground and hills in the background. A 'Message from CEO Patricia Poppe' is featured in a circular inset. A news item states: 'PG&E's new remote microgrid replaces traditional electric poles and wires—reducing wildfire risk for PG&E customers in a high fire-threat area.' At the bottom, the URL www.pgecorp.com/sustainability is provided.





Questions & Discussion



Contact Us

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For more information, visit www.epa.gov/climateleadership