

Climate change and audits – What will climate change mean for insurance audits?

May 2022



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Agenda for today's discussion

1. Climate Risk and Responsibilities of the auditor
2. Regulatory drivers for increased transparency over climate change in financial reporting
3. SEC Reporting - Preparing for financed emissions and scenario analysis
4. The audit of climate risk and how actuaries could integrate
5. Q&A

Our ESG team members with you today



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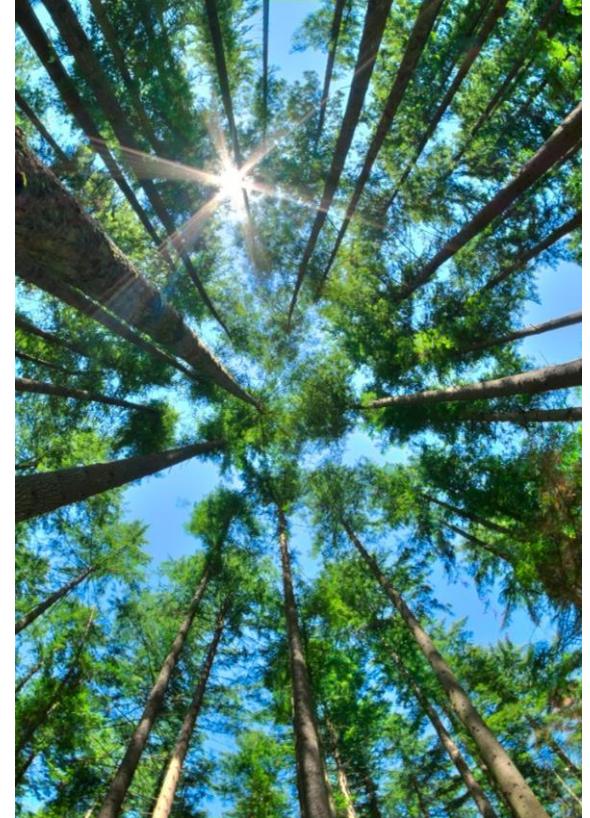
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Polling question



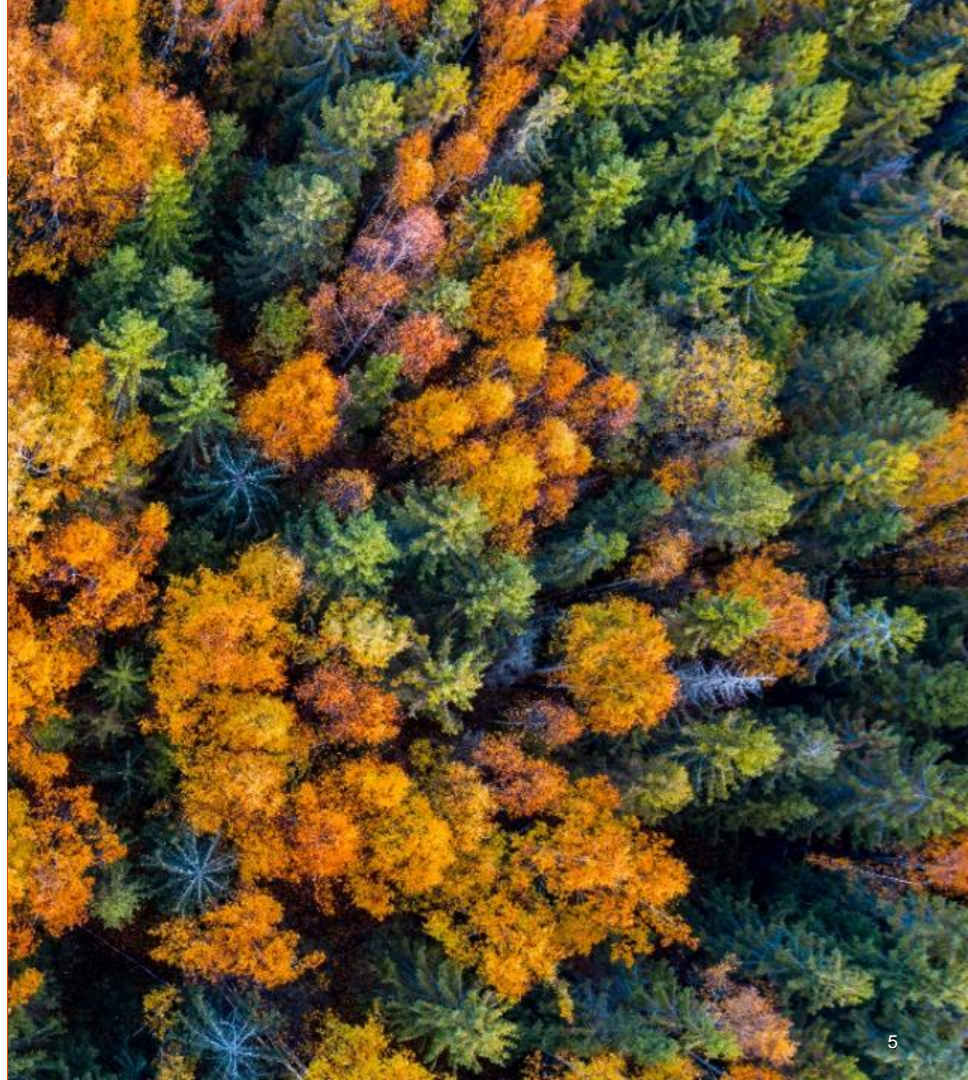
Does your company currently produce any of the following climate-related disclosures?

- A** Climate risks in 10K (typically in risk factors)
- B** ESG/Corporate Sustainability Report
- C** CDP Response
- D** Standalone TCFD Report
- E** Some climate disclosures different from above
- F** More than one of the above
- G** No climate disclosures



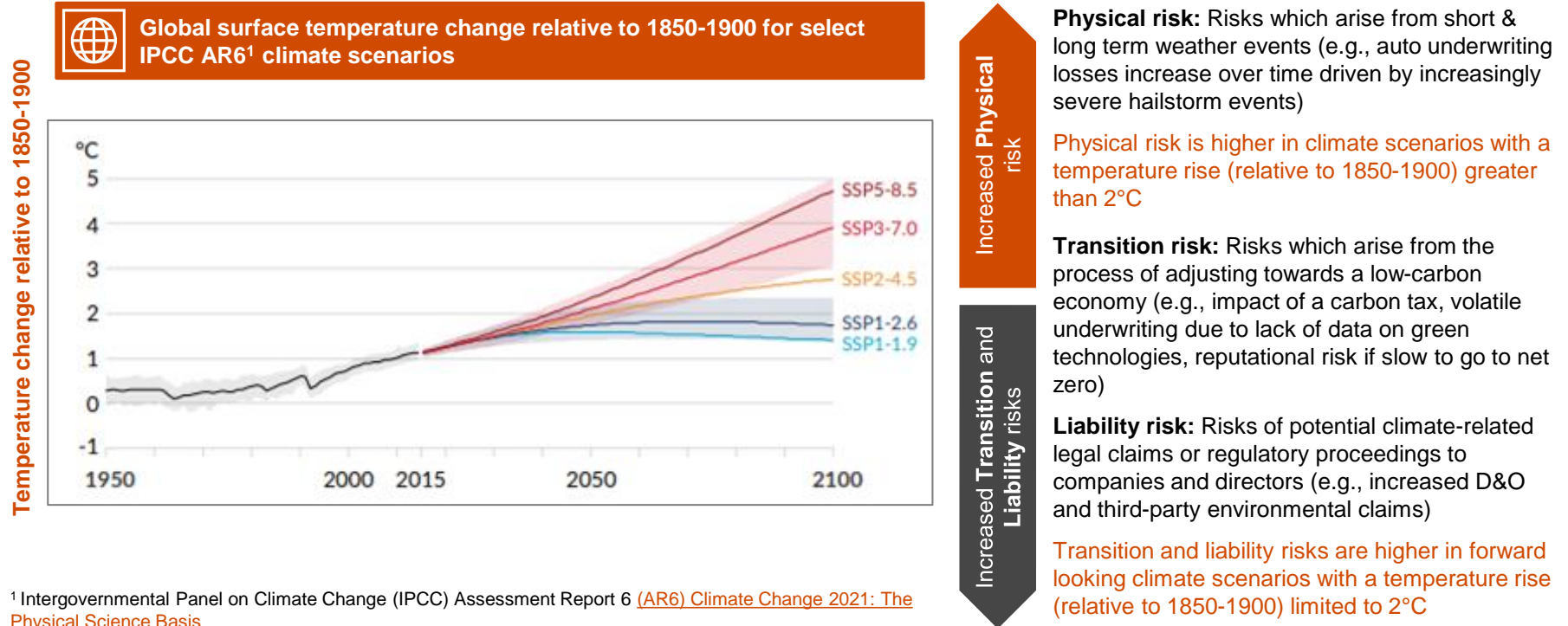
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Climate Risk and Responsibilities of the auditor



Climate change poses new business risks to insurance companies

Depending on future efforts to curb climate change, or lack thereof, insurers will be faced with a new set of risks to consider as part of ongoing operations.



¹ Intergovernmental Panel on Climate Change (IPCC) Assessment Report 6 (AR6) Climate Change 2021: The Physical Science Basis

Climate risk to insurers can be classified into three buckets



Underwriting risks



Investment risks

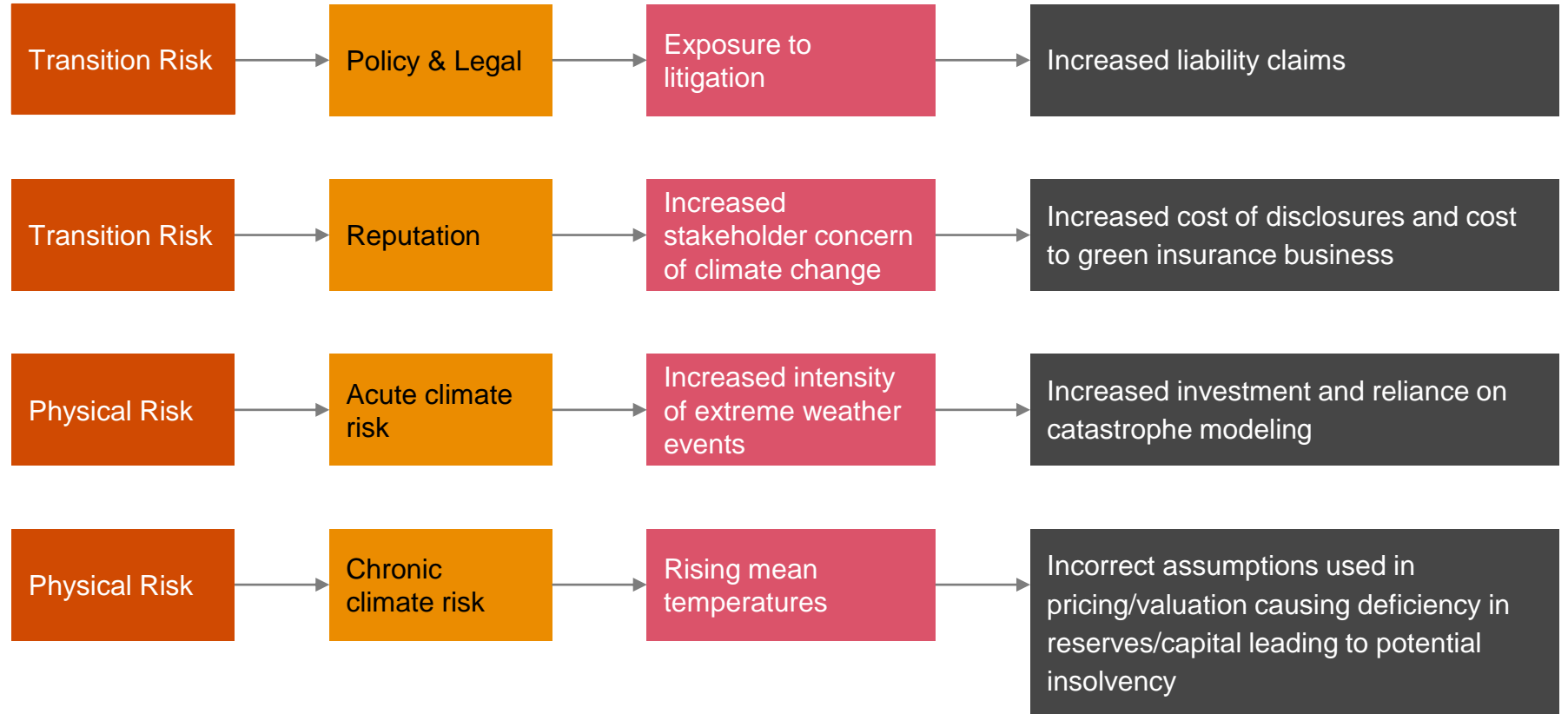


Operational risks

Transition Risk

Physical Risk

Climate risk manifestation examples for P&C insurers





Financial statement auditors have a responsibility to consider the appropriateness of management's consideration of the financial statement implications of potential risks of material misstatement, which encompasses climate-related risks.

Center for Audit Quality, September 2021



The role of the auditor



Understand how climate risks have been considered

- Engage in discussion to understand the ways management and those charged with governance have considered climate change
- Review of any voluntary climate reporting



Know how climate risks have been incorporated into financial statements

- Review commitments made and how this is or is not reflected in the financial statements
- Do voluntary disclosures align to financial statements?



Assess how climate risks impact the audit risk assessment

- Considerations of how commitments impact the future of the company
- Analysis of the ways a company's business may be impacted by climate change
- The level the company is making these considerations themselves



Key questions

- How do environmental and climate risk topics come together in governance, theory, and practice within the organization?
- What public and private market claims is the company making at the enterprise and product levels? How are these documented?
- How are regional (legal entity) vs. global commitments and approaches aligned or different?
- How is the company managing regional and overall regulatory, standards, and commitments compliance?
- How are trade-offs between goals, opportunities, and risks governed?
- How is the company managing the overall legal and reputational risk in regards to environmental and climate matters?

Polling question



What products do you think may be most impacted by climate change?

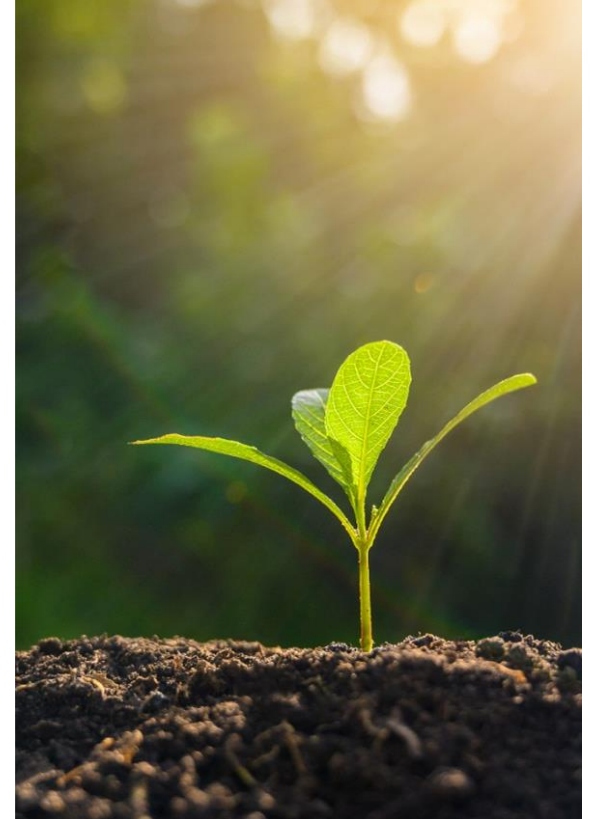
A Worker's compensation

B Commercial property/Homeowners

C D&O

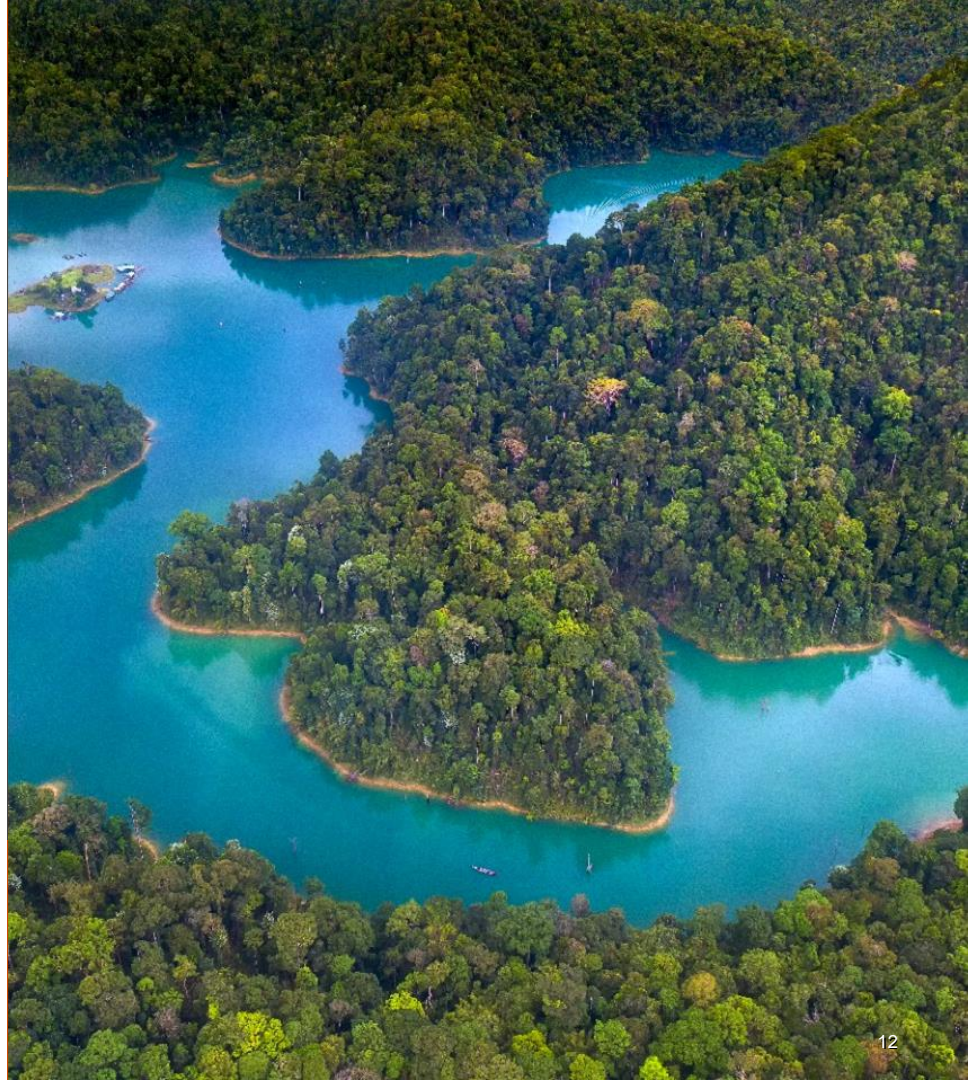
D General products/Liability

E Auto liability



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Regulatory drivers for increased transparency over climate change in financial reporting

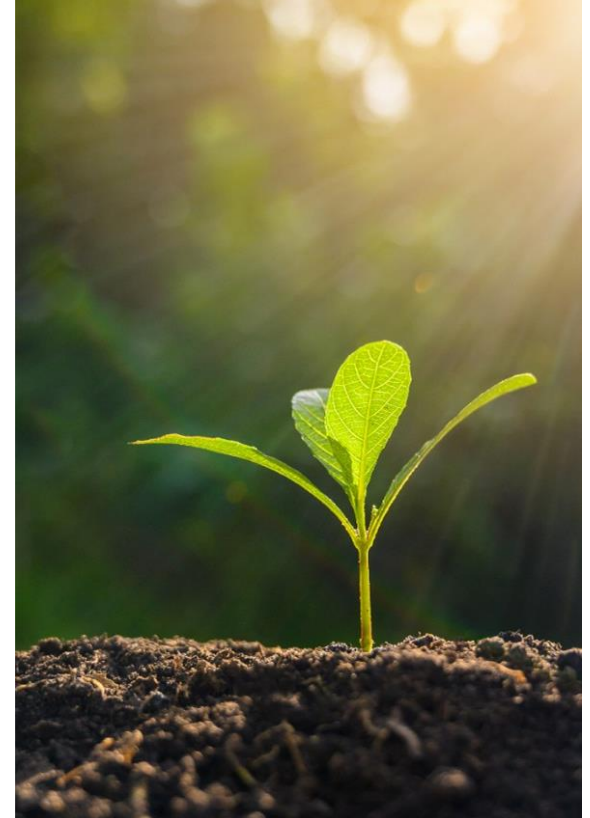


Polling question



What, if any, regulatory guidance regarding climate disclosures are you aware of?

- A** New SEC Proposed rules
- B** NAIC climate risk surveys
- C** NYDFS
- D** Not aware of any climate disclosure regulations
- E** Aware of multiple disclosure regulations



What are the key regulatory ESG drivers?

Movement from regulators on ESG topics is as key driver for many insurers to consider integration of ESG into their businesses.



NAIC



California DOI



NYDFS



SEC



European Commission



UK PRA

TCFD underpinning many regulatory requirements

What is the TCFD?

The Task Force on Climate-related Financial Disclosures (TCFD) issued guidance for climate risk disclosure for all sectors, and specific recommendations for certain sectors (such as insurance)

01 Insufficient disclosure

The TCFD is an advisory body set up by the G20 to address concerns around insufficient disclosure of climate-related risks and opportunities for businesses.

02 Led by industry leaders

The TCFD is chaired by Michael Bloomberg and consists of 32 industry leaders, including representatives from Blackrock and Unilever

03 Informed investment decisions

The TCFD recommendations aim to enable better understanding of exposures to climate risks and opportunities.

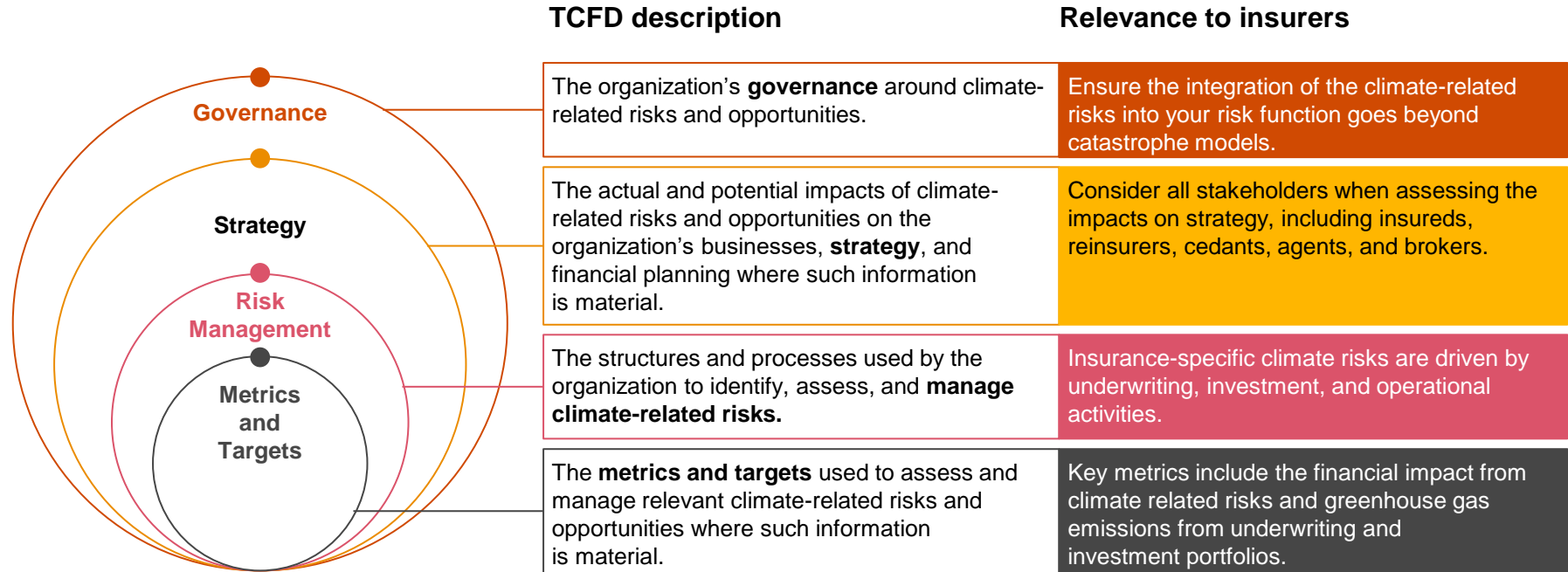
04 Progress

The Task Force released a status report in 2021, highlighting the progress made in companies' climate risk disclosure over the past year. In 2021 the TCFD issued proposed guidance on climate-related metrics, targets, and transition plans. An additional report specific to the insurance industry, "Insuring the Climate Transition", was issued in January 2021.

TCFD has quickly become the industry standard for how companies should orient around climate risk, and how they should disclose on it publicly

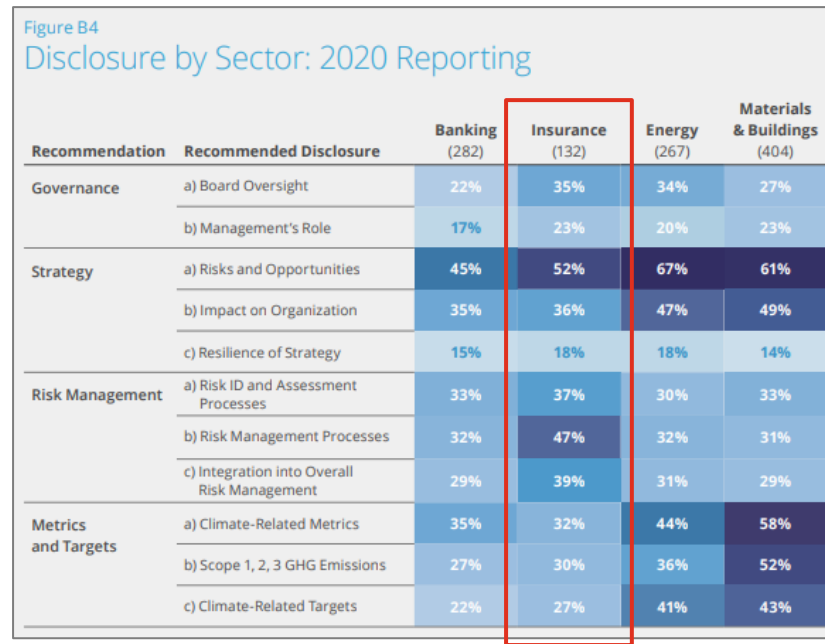
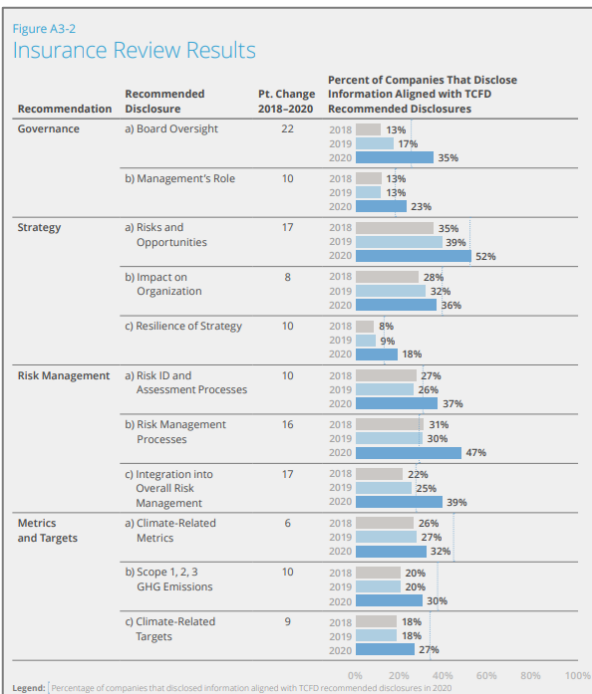
More than 2,600 organizations have announced support for the guidelines, including global financial firms responsible for assets of \$194 trillion

TCFD has four disclosure components



TCFD reporting in the insurance industry – Current state

- For the 2021 report (based on 2020 data), TCFD AI analyzed the sustainability reporting of **132 insurance companies**, ranging in size from \$1 billion to \$1.3 trillion in assets (median size of \$29 billion)
- The most common disclosure among insurers was climate-related risks and opportunities, where 52% made a disclosure.



Source: <https://www.fsb.org/wp-content/uploads/P141021-1.pdf>



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Our core bargain from the 1930s is that investors get to decide which risks to take, as long as public companies provide full and fair disclosure and are truthful in those disclosures.

Gary Gensler, SEC Chair - March 2022

SEC climate disclosure rule proposal

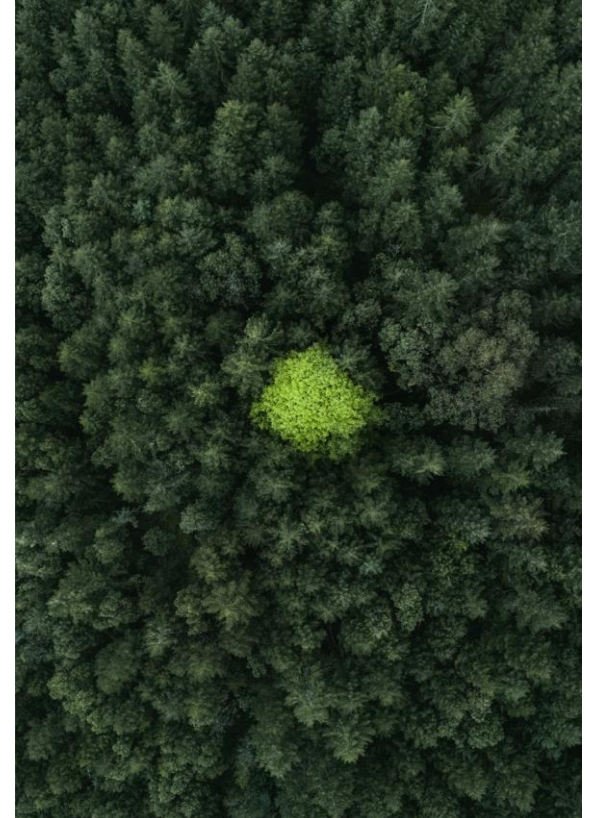


What happened

On March 21, the SEC proposed new rules for climate change disclosures. While they are not yet final and are open for public comments, the SEC is likely to advance rules that require disclosure of:

- Prospective risks and material impacts on the business, strategy and outlook caused by climate change, generally in compliance with the Task Force on Climate-Related Financial Disclosures (TCFD) disclosures
- Scope 1 and 2 greenhouse gas emissions
- Scope 3 emissions if material or if the registrant has set a GHG emissions reduction target that includes Scope 3 emissions (e.g., a science-based GHG reduction target)
- Additional qualitative and quantitative climate risk information as they pertain to risks and opportunities
- Financial impacts of cost of climate change

Companies across the industry spectrum should start focusing now on the potential implications of the proposal to accelerate their climate change reporting strategies, processes and controls.



Proposed disclosure highlights



Requirements impacting the financial statements

New financial statement footnote disclosure

- Climate-related financial statement metrics intended to be derived from financial statement line items:
 - Financial impact metrics*
 - Expenditure metrics*
 - Financial estimates and assumptions
- Materiality - 1% threshold by financial statement line item, with the sum of absolute impacts
- Subject to financial statement and ICFR audit

*Disclosure would include financial impact of and expenditures to mitigate risks related to severe weather events and other natural conditions; as well as impacts of and expenditures related to transition activities.



Requirements impacting the 10-K

New qualitative disclosures

- Details on climate-related governance activities, including the board's oversight of risk and management's role in assessing and managing those risks
- Impact of climate change on strategy, business model, and outlook, including how a company assesses resilience (e.g., through scenario analysis)
- GHG emissions metrics, including an attestation requirement on Scope 1 and Scope 2 for large accelerated and accelerated filers
- Climate-related targets and goals, including transition plans
- Subject to "other information" audit procedures

iXBRL tagging required for both narrative and quantitative disclosures

SEC climate disclosure rule – What’s next

- The proposal is open for public comment until May 20 (or 30 days after it is published in the Federal Register, if later).
- Company’s should carefully review the requirements under the proposal and submit comments on any areas where expectations are not clear or may not fully address idiosyncrasies of your business model.
- If the rules are finalized within the 2022 calendar year, applicability is as follows for calendar year end companies:

Table 1 – Disclosures

Registrant type	Disclosure compliance date	
	All proposed disclosures, including GHG emissions metrics: Scope 1, Scope 2, and associated intensity metric, but excluding Scope 3	GHG emissions metrics: Scope 3 and associated intensity metric
Large accelerated	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)
Accelerated and non-accelerated	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)
Smaller reporting company	Fiscal year 2025 (filed in 2026)	Exempted

Table 2 – Assurance

Registrant type	Scope 1 and Scope 2 disclosure compliance date	Limited assurance	Reasonable assurance
Large accelerated	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Fiscal year 2026 (filed in 2027)
Accelerated	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	Fiscal year 2027 (filed in 2028)



Check out these PwC resources:

- [First look at the SEC's climate disclosure proposal](#)
- [SEC Climate risk disclosures landing page](#)

The new NAIC climate change survey is closely aligned with the TCFD recommendations



Current NAIC climate change survey

- Current and original NAIC climate change survey, last modified in its adopted year of 2010
- Since adoption in 2010, an increasing number of states have required insurance companies to submit the survey - 15 states now require firms writing over \$100m to complete the survey:
 - CA, CT, DE, DC, ME, MD, MA, MN, NM, NY, OR, PA, RI, VT, WA
- Original structure of climate risk disclosure survey consisted of eight (8) “Yes/No” questions, with “Yes” answers requiring written explanations of how climate risk is addressed



Timeframe transition to new NAIC climate change survey

- For 2022:
 - Submission deadline moved from traditional date of August 31, to November 30th
 - Insurers can submit TCFD report for 2022 if already completed
 - If no TCFD report completed then survey must be completed
- For 2023:
 - Submission deadline is August 31
 - Submit a TCFD report which is fully compliant with all the survey questions, or
 - Respond to the new survey

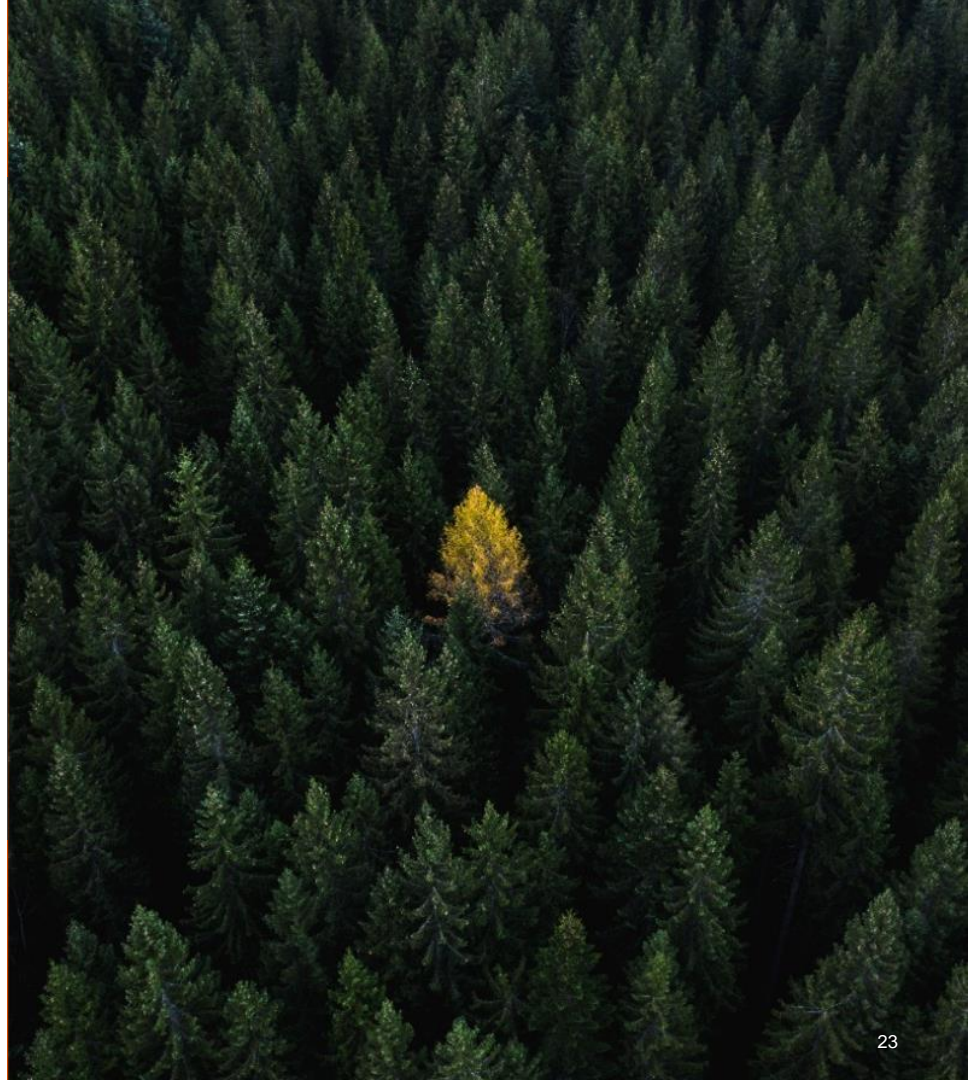


Newly presented NAIC climate change survey

- New NAIC climate change survey structure based on the TCFD four (4) pillar reporting framework:
 - **Governance, Strategy, Risk Management, and Metrics and Targets**
- Each pillar is a designated section of the new NAIC climate change survey, with each section having narrative and closed-ended “Yes/No”
 - The closed-ended questions directly correspond to the narrative portions, allowing for explanation and qualification of “Yes/No” response
- In addition to TCFD framework based questions, insurance-specific questions and GHG emission disclosure questions are included
 - Insurance
 - Whether and how insurer has addressed climate related impacts on underwriting and investment risks
 - How companies have encourage policyholders to manage their own risks
 - GHG Emissions
 - How did insurers disclose GHG emissions including Scopes 1, 2, and “if appropriate” 3

3

SEC Reporting - Preparing for financed emissions and scenario analysis



Some practical actions to consider



The proposed disclosures are broadly aligned with existing frameworks, such as TCFD and the GHG Protocols. Public companies should evaluate their climate change reporting while assessing the processes and controls that support it. All businesses are at different points in their ESG journey, but here are five things every company may want to consider.

1 

Assemble a cross-functional team to create accountability for ESG performance: The finance function has the experience to oversee accounting, controls and reliability of ESG information while sustainability teams have the deep subject matter experience and context. Companies should address any knowledge gaps through upskilling or hiring to make sure they have the right team in place.

2 

Make sure you have the data that regulators will expect. It's critical to clearly define ESG metrics, their scope and boundaries, what systems the information comes from, and who the owners are inside the company. To do so, companies should gather baseline data to compare current performance against future goals and milestones.

3 

Set an overarching strategic approach to ESG. This is not an exercise merely to tick a regulatory box, but to create sustainable advantage and value. Companies should connect ESG strategies, milestones and reporting to the overall business strategy.

4 

Upskill corporate directors. Boards—especially audit committee members—need to better understand how ESG fits into the overall business strategy to appropriately manage governance oversight responsibilities.

5 

Prepare for independent assurance. The SEC proposed independent, third-party assurance for Scope 1 and Scope 2 emissions to bolster confidence in climate change information (for accelerated or large accelerated filers).

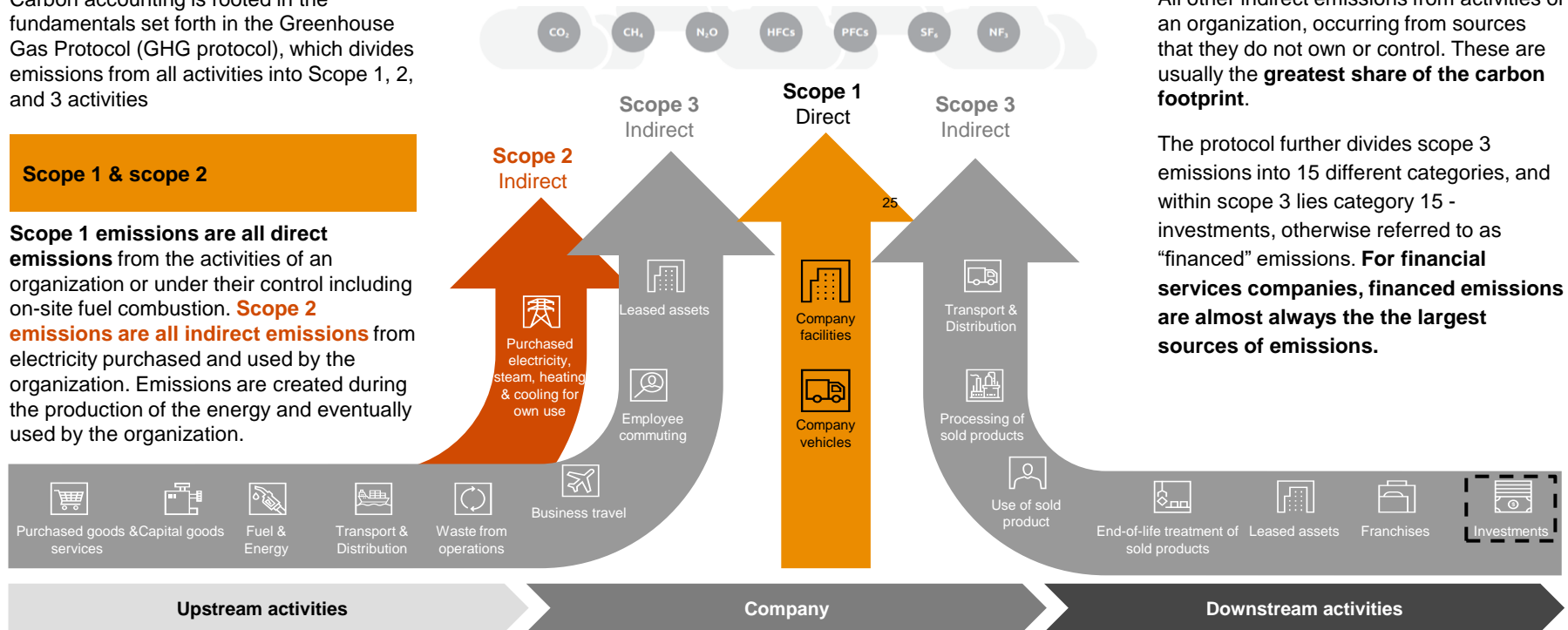
What are financed emissions?

GHG protocol

Carbon accounting is rooted in the fundamentals set forth in the Greenhouse Gas Protocol (GHG protocol), which divides emissions from all activities into Scope 1, 2, and 3 activities

Scope 1 & scope 2

Scope 1 emissions are all direct emissions from the activities of an organization or under their control including on-site fuel combustion. **Scope 2 emissions are all indirect emissions** from electricity purchased and used by the organization. Emissions are created during the production of the energy and eventually used by the organization.



Scope 3

All other indirect emissions from activities of an organization, occurring from sources that they do not own or control. These are usually the **greatest share of the carbon footprint**.

The protocol further divides scope 3 emissions into 15 different categories, and within scope 3 lies category 15 - investments, otherwise referred to as “financed” emissions. **For financial services companies, financed emissions are almost always the the largest sources of emissions.**

The types of GHG commitments in the market

Carbon neutral targets

Achieve neutrality by **purchasing the equivalent offsets**

- No imposed scope or timeline
- Offsets used to compensate for emissions
- No GHG reduction target required
- Unregulated offsetting purchase scheme

- ✗ Questionable long term credibility
- ✗ Does not address value and requires annual offset payments
- ✓ Short term quick win

Science based targets

5-15 years reduction targets in line with climate science.

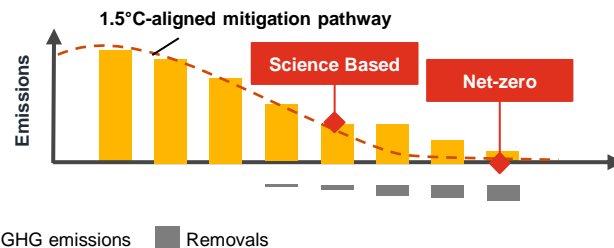
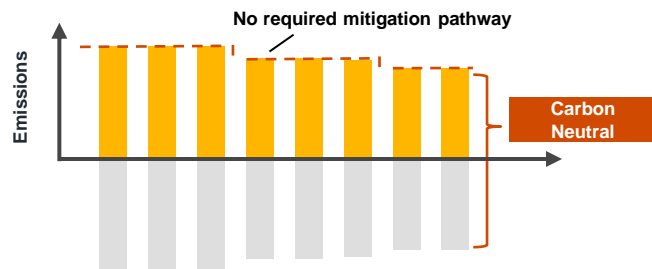
- Operational and some material value chain emissions
- Removals used to neutralize residual emissions
- Set reductions year on year in line with 1.5C
- Targets are validated by an independent body

- ✓ Long term credibility
- ✓ Addresses value from avoided risk and opportunities
- ✗ Often requires significant resources to achieve

Net-zero targets

Long term reduction targets in line with climate science to meet Net Zero by 2050.

- Operational and material value chain emissions
- Removals used to neutralize residual emissions
- Set reductions year on year in line with 1.5C
- Targets are validated by an independent body
(guidance to be published in 2021)



PwC POV:

- Current practice shows confusion with the term “Net Zero.” Some companies have committed to “Net Zero” but are only focusing on Operations and may even be planning to use offsets. While in the short term this may work....investors and customers are wising up and demanding more
- Final definition by [SBTi of Net Zero](#) was issued recently in Spring 2021. We expect a greenwashing list (of whose targets aren't real) to be published soon.

Lessons from the trenches on financed emissions



Immature standards

The standards across financed emissions inventories, target setting, executing against targets and reporting results are emerging and are generally in pilot. This makes adaptability and comfort with some ambiguity key success factors for establishing suitable baseline, setting targets and integrating those targets into your investment operations.



Science based targets require comprehensive portfolio coverage

Under the pilot guidance for financial services, SBTi has been strict about requiring targets to cover the entire portfolio from the outset, despite receiving industry push back in favor of step-wise approaches moving sector by sector and/or asset class by asset class. Therefore, companies may need to consider broadening the scope of net-zero pathways to include all asset classes (such as mortgages and government bonds) prior to submitting a plan to the SBTi for approval.



Baselining challenges

Many financed emissions baselines are not fit for purpose for target setting and execution because they rely too heavily on estimates. This restricts options for reducing financed emissions when executing against the targets.



Engagement with key investment teams is essential

Investment teams should be engaged at the outset of a net zero project and a series of workshops should be conducted with those teams at critical points in the project. This requires a modest commitment of time from the investment teams, but it is essential to building buy in and developing a target setting and execution framework that will meet the long-term goal. In our past experience, we have found that investment teams gladly get engaged once the plan is laid out.



Data availability and limitations

The data sets available for financed emissions are as good as they can be today, but our financial services clients have found that the coverage with real data versus modeled data is in the 50% range, although this will vary by portfolio. A greater reliance on modeled data can constrain the options for achieving the targets and distort the integration of the targets into investment decision making.

In our experience, our financed emissions clients have either purchased data, developed their own data, or have worked collaboratively with us to develop data that is fit for purpose when executing against the targets. The data development methodology has generally been a function of internal system capabilities and budget.

Overseeing climate change risk management and scenario testing



Risk assessment

In the marketplace, we observe insurers conducting a **comprehensive risk assessment** of the risks to its business from climate change. This typically covers both transition risks and physical risks. Such a risk assessment may include:

- a. High/Medium/Low assessment of the business across risks types, investments, products and key assumptions
- b. Most often measured based on likely frequency and severity of the risk if it were to emerge
- c. Isolating the top 5 risks to the business and measuring their impact accordingly

This risk assessment is used to inform the scenario testing exercise.



Scenario testing

Insurers may perform scenario testing exercises after completion of the risk assessment; these typically focus on three specific areas of an insurer's business:

1. Asset portfolio

- Calculate the impact of climate change on the investments held under different climate change scenarios and time horizons

1. Underwriting portfolio

- Stress the key assumptions and processes used to understand and manage accumulations and exposure

1. Operational impact

- Assess the operational impact of extreme/intensifying weather events on corporate locations and employee homes

Where possible, companies may seek to **leverage existing scenario testing framework** to streamline this process.



Business integration

Insurers may assess how the results of the risk assessment and scenario testing exercise integrate into the business, specifically considering:

- a. Governance framework
- b. Risk management processes
- c. Business strategy
- d. Integration into ESG or other disclosures

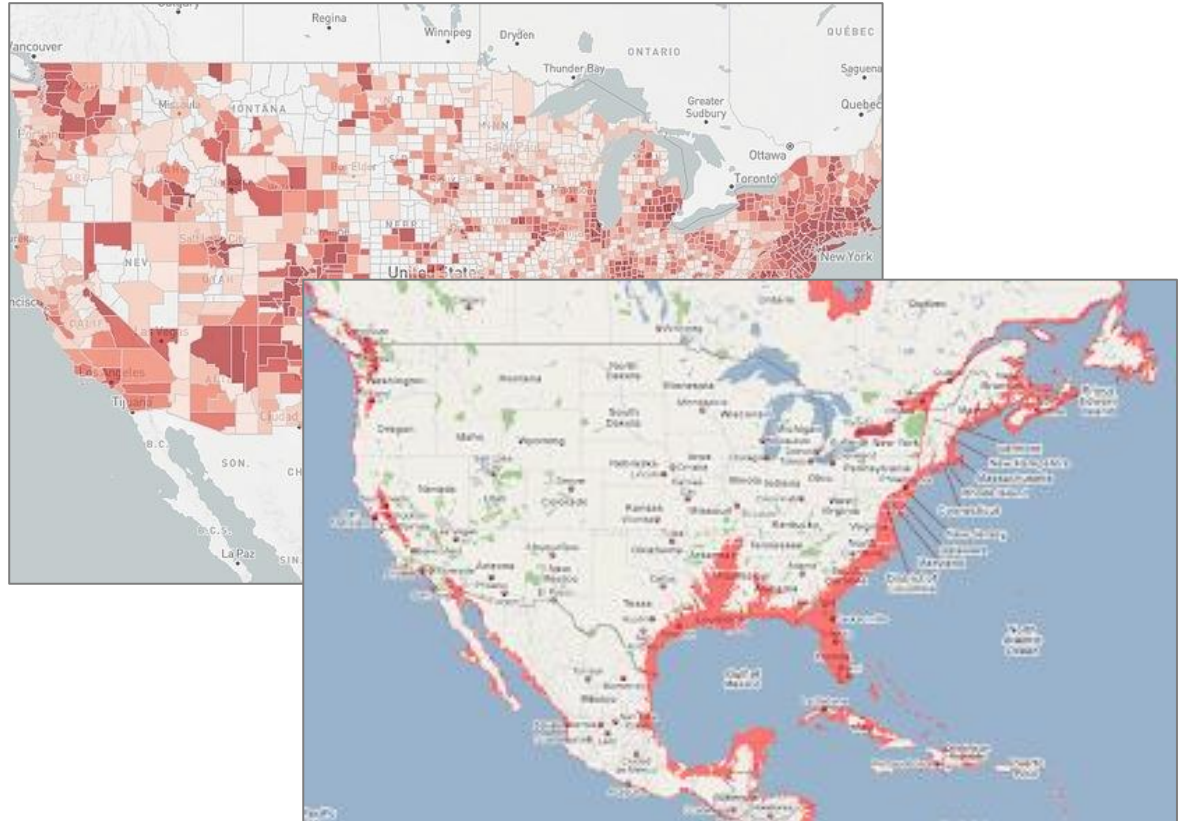
Illustrative climate change impacts on P&C insurance coverages

1 Coverage Type	Workers' Compensation	Commercial Property/ Homeowners	D&O	General/ Products Liability	Auto Liability	Others
2 Transition Risk	<p>Medium</p> <p>Workers transition from jobs with credible loss history to newer technology where claims development trends are not yet known</p>	<p>Low</p> <p>Technologies required to meet new environmental building regulations may fail, leading to increased business interruptions</p>	<p>High</p> <p>Climate-related litigation being brought against insureds requiring unexpected levels of claim and defense costs</p>	<p>Medium</p> <p>Increasing litigation against heavy polluters for their contributions to climate change creates latent claim risks</p>	<p>Low</p> <p>Greater adoption of electric vehicles could lead to underpricing/higher claims ratios due to limited historical data on repair costs</p>	<p>Unknown</p> <p>Transition risks may continue to emerge from unexpected sources as changes are made to move towards a low carbon economy</p>
3 Physical Risk	<p>Medium</p> <p>Heatwaves leading to heat stress of more workers, particularly in the agricultural, construction, and manufacturing fields</p>	<p>High</p> <p>Increased frequency and severity of claims related to damage to buildings, storefronts, etc from severe weather events</p>	<p>Low</p> <p>N/A</p>	<p>Medium</p> <p>Coverages such as contractors' liability could see rise in weather-related damages claims</p>	<p>Medium</p> <p>Increased personal auto comprehensive coverage claim costs due to severe weather</p>	<p>Unknown</p> <p>Physical risks may result in downstream effects not currently felt or identified</p>

Key considerations for the integration of climate change into underwriting operations and scenario testing

Companies should consider the following questions:

- How do I expect climate change to **affect my key risk metrics in different locations** and what calculation mechanism should I use to assess this?
- What would my **current exposures look like when adjusted** to take into account the effect of climate change in a 2C or 4C global warming scenario at different time horizons?
- How should I **adjust my underwriting/pricing today** to allow me to transition to my target portfolio incorporating climate change factors?
- How should I incorporate expected climate related change into my **reinsurance strategy** and reinsurance credit risk analysis?



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The audit of climate risk and how actuaries could integrate

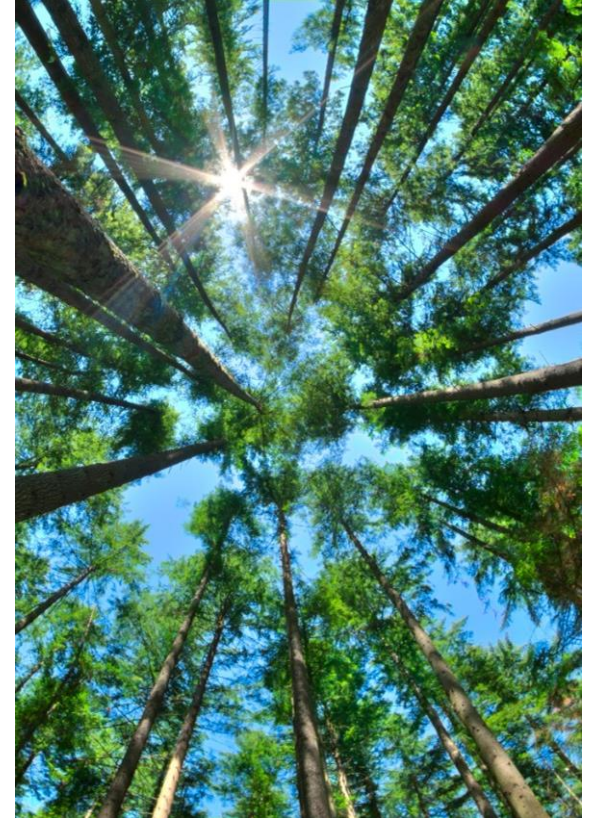


Polling question



What ways do actuaries integrate into the reporting function within your organization?

- A** Providing data to finance team and auditors
- B** Participating in discussions on key risk factors
- C** Overseeing final results related to actuarial liabilities
- D** Another function separate for the above
- E** Actuaries do not participate in financial reporting



Actuaries have roles that fit into many aspects of financial reporting







Preparing to be audited - key questions and challenges

Category

Overview

Challenges

Key questions

 <p>Emissions data</p>	<p>Emissions data is used to quantify a corporate carbon footprint and is broken up into three cohorts:</p> <p>Scope 1: Direct GHG emissions from sources owned or controlled</p> <p>Scope 2: Indirect emissions from the generation of purchased energy</p> <p>Scope 3: All other indirect emissions (not included in scope 2) that occur in the value chain (including financed emissions)</p>	<ul style="list-style-type: none"> Initially, the data collection process can be largely manual Scope 3 emissions can require analysis of complex value chains, with varied datasets and reliance on supplier or customer data 	<ul style="list-style-type: none"> What is in scope of your GHG quantification and how will you source data about the emissions of your clients? How will you set a GHG reduction target?
 <p>Scenario data</p>	<p>Hypothetical constructs that provide a forward-looking view into how different types of climate-related risks and opportunities may materialise if certain trends continue or certain conditions are met, and are typically broken down into physical and transition pathways:</p> <p>Physical: Impact from increasing intensity of weather events</p> <p>Transition: Impacts from the transition to a low carbon economy</p>	<p>Parameters, assumptions, and time horizons vary</p> <p>Scenarios need to be bridged to align with portfolio concentrations and profile. Key assumptions can differ substantially.</p>	<ul style="list-style-type: none"> Which scenarios do you want to consider, and how will those scenarios be integrated into existing stress testing? What regulatory requirements are applicable in this space?
 <p>Transition and physical risk ratings</p>	<p>Third party vendor data provided by rating agencies to provide a perspective on the physical and transition risk ratings of counterparties. This data can be integrated into investment selection decisions and also scenario analysis exercises, to support understanding of the aggregate physical and transition risk to overall portfolios.</p>	<ul style="list-style-type: none"> Understanding of risk rating methodologies and selection criteria for derivation of ratings for individual companies Cost and availability of data 	<ul style="list-style-type: none"> How will you use physical and transition risk ratings, and what are your criteria for selection? How will the risk ratings be used in climate stress testing exercises?
 <p>Counterparty data</p>	<p>Position-level data that can be leveraged to measure the impact of physical and transition risk on exposures, and also other ESG factors such as D&I metrics. Can be utilized in underwriting decisions and external ESG related reporting.</p>	<p>Inconsistency in data disclosed by counterparties -- metrics, definitions, assumptions</p> <p>Metric purpose alignment -- ESG scores account for S and G</p>	<ul style="list-style-type: none"> Which components of Environmental, Social, Governance do you want to consider? How reliable/volatile is the counterparty data you are considering?

5

Q&A



Thank you



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