Emerging Climate Change Regulations and Disclosures

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pwc

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Agenda for today's discussion

1. Climate risk faced by insurers
2. Emerging regulation
3. Preparing for financed emissions and scenario analysis
4. Q&A

Our ESG team members with you today

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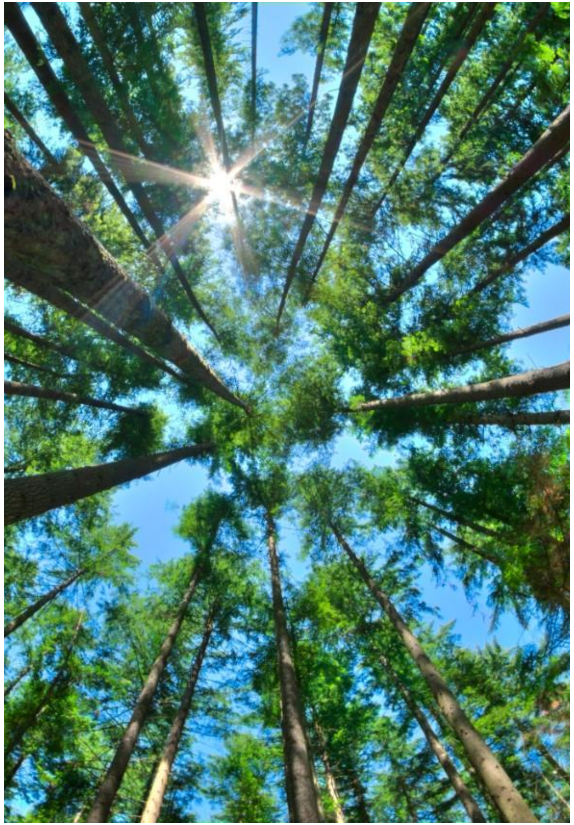
1

Climate risk faced by insurers

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

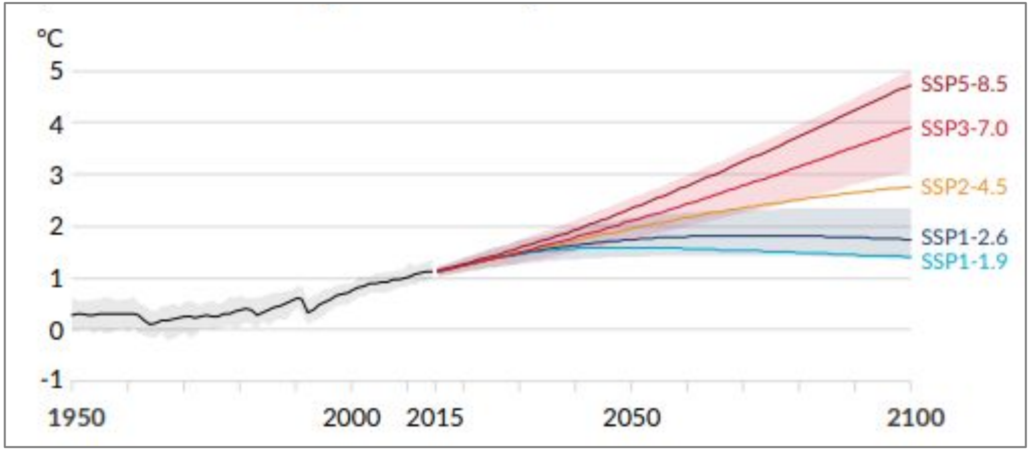


Climate change poses new business risks to insurance companies

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.

Global surface temperature change relative to 1850-1900 for select IPCC AR6[1] climate scenarios

Temperature change relative to 1850-1900



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

Increased **Physical** risk

Physical risk: Risks which arise from short & long term weather events (e.g., auto underwriting losses increase over time driven by increasingly severe hailstorm events)

Physical risk is higher in climate scenarios with a temperature rise (relative to 1850-1900) greater than 2°C

Increased **Transition** and **Liability** risks

Transition risk: Risks which arise from the process of adjusting towards a low-carbon economy (e.g., impact of a carbon tax, volatile underwriting due to lack of data on green technologies, reputational risk if slow to go to net zero)

Liability risk: Risks of potential climate-related legal claims or regulatory proceedings to companies and directors (e.g., increased D&O and third-party environmental claims)

Transition and liability risks are higher in forward looking climate scenarios with a temperature rise (relative to 1850-1900) limited to 2°C

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

Transition Risk	Policy & Legal	Exposure to litigation	Increased liability claims
Transition Risk	Reputation	Increased stakeholder concern of climate change	Increased cost of disclosures and cost to green insurance business
Physical Risk	Acute climate risk	Increased intensity of extreme weather events	Increased investment and reliance on catastrophe modeling
Physical Risk	Chronic climate risk	Rising mean temperatures	Incorrect assumptions used in pricing/valuation causing deficiency in reserves/capital leading to potential insolvency

Polling question

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

A Worker's compensation

B Commercial property/Homeowners

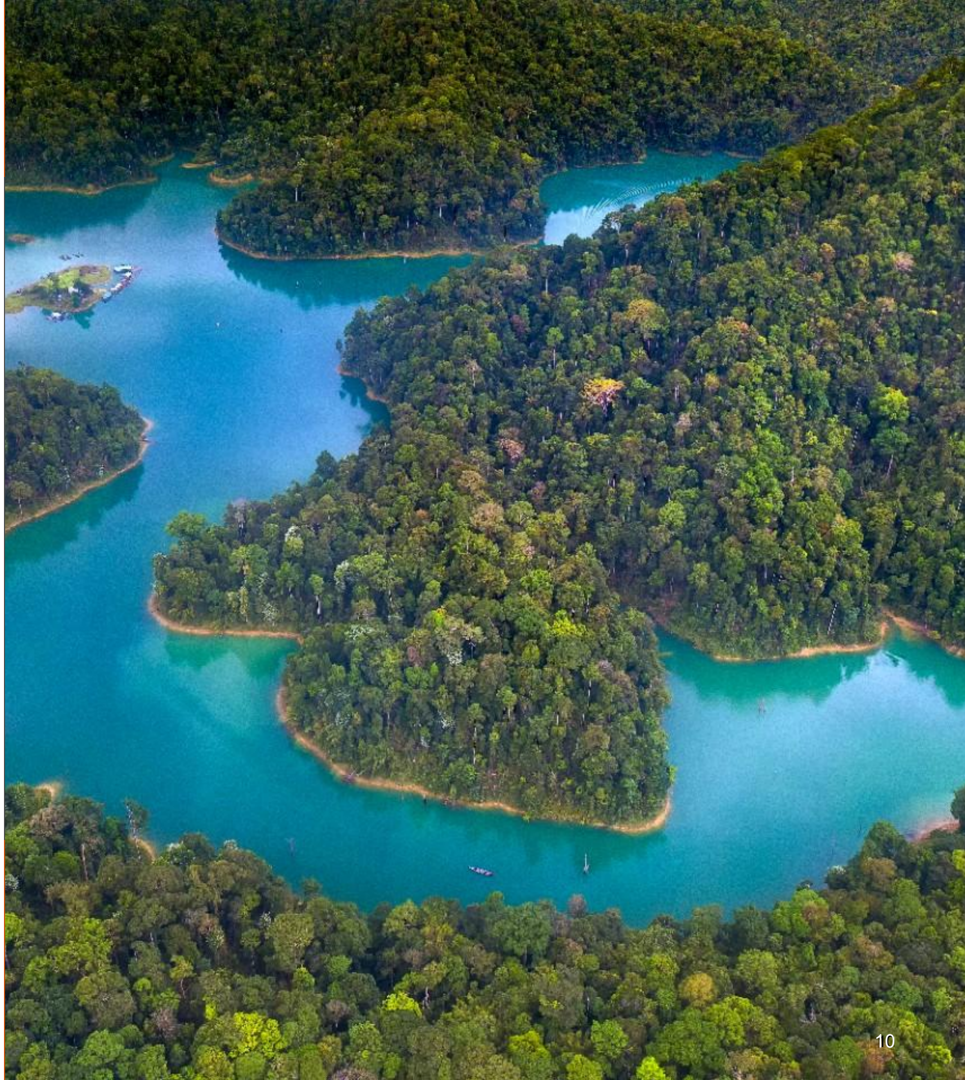
C D&O

D General products/Liability

E Auto liability

2

Emerging regulation



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 description	Relevance to insurers
The organization’s **governance** around climate-related risks and opportunities.	Ensure the integration of the climate-related risks into your risk function goes beyond catastrophe models.
The actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, **strategy**, and financial planning where such information is material.	Consider all stakeholders when assessing the impacts on strategy, including insureds, reinsurers, cedants, agents, and brokers.
The structures and processes used by the organization to identify, assess, and **manage climate-related risks.**	Insurance-specific climate risks are driven by underwriting, investment, and operational activities.
The **metrics and targets** used to assess and manage relevant climate-related risks and opportunities where such information is material.	Key metrics include the financial impact from climate related risks and greenhouse gas emissions from underwriting and investment portfolios.

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.

Figure A3-2

Insurance Review Results

Recommendation	Recommended Disclosure	Pt. Change 2018–2020	Percent of Companies That Disclose Information Aligned with TCFD Recommended Disclosures: 2018	2019	2020
Governance	a) Board Oversight	22	13%	17%	35%
	b) Management's Role	10	13%	13%	23%
Strategy	a) Risks and Opportunities	17	35%	39%	52%
	b) Impact on Organization	8	28%	32%	36%
	c) Resilience of Strategy	10	8%	9%	18%
Risk Management	a) Risk ID and Assessment Processes	10	27%	26%	37%
	b) Risk Management Processes	16	31%	30%	47%
	c) Integration into Overall Risk Management	17	22%	25%	39%
Metrics and Targets	a) Climate-Related Metrics	6	26%	27%	32%
	b) Scope 1, 2, 3 GHG Emissions	10	20%	20%	30%
	c) Climate-Related Targets	9	18%	18%	27%

Legend: Percentage of companies that disclosed information aligned with TCFD recommended disclosures in 2020

Figure B4

Disclosure by Sector: 2020 Reporting

Recommendation	Recommended Disclosure	Banking (282)	Insurance (132)	Energy (267)	Materials & Buildings (404)
Governance	a) Board Oversight	22%	35%	34%	27%
	b) Management's Role	17%	23%	20%	23%
Strategy	a) Risks and Opportunities	45%	52%	67%	61%
	b) Impact on Organization	35%	36%	47%	49%
	c) Resilience of Strategy	15%	18%	18%	14%
Risk Management	a) Risk ID and Assessment Processes	33%	37%	30%	33%
	b) Risk Management Processes	32%	47%	32%	31%
	c) Integration into Overall Risk Management	29%	39%	31%	29%
Metrics and Targets	a) Climate-Related Metrics	35%	32%	44%	58%
	b) Scope 1, 2, 3 GHG Emissions	27%	30%	36%	52%
	c) Climate-Related Targets	22%	27%	41%	43%

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

> 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

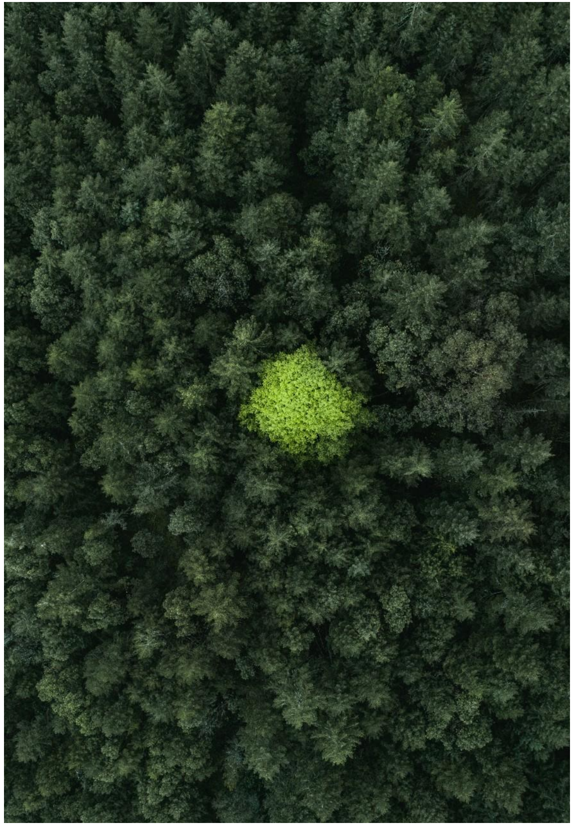
SEC climate disclosure rule proposal

? 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 public comment period for the proposal closed June 17, 2022.
- 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

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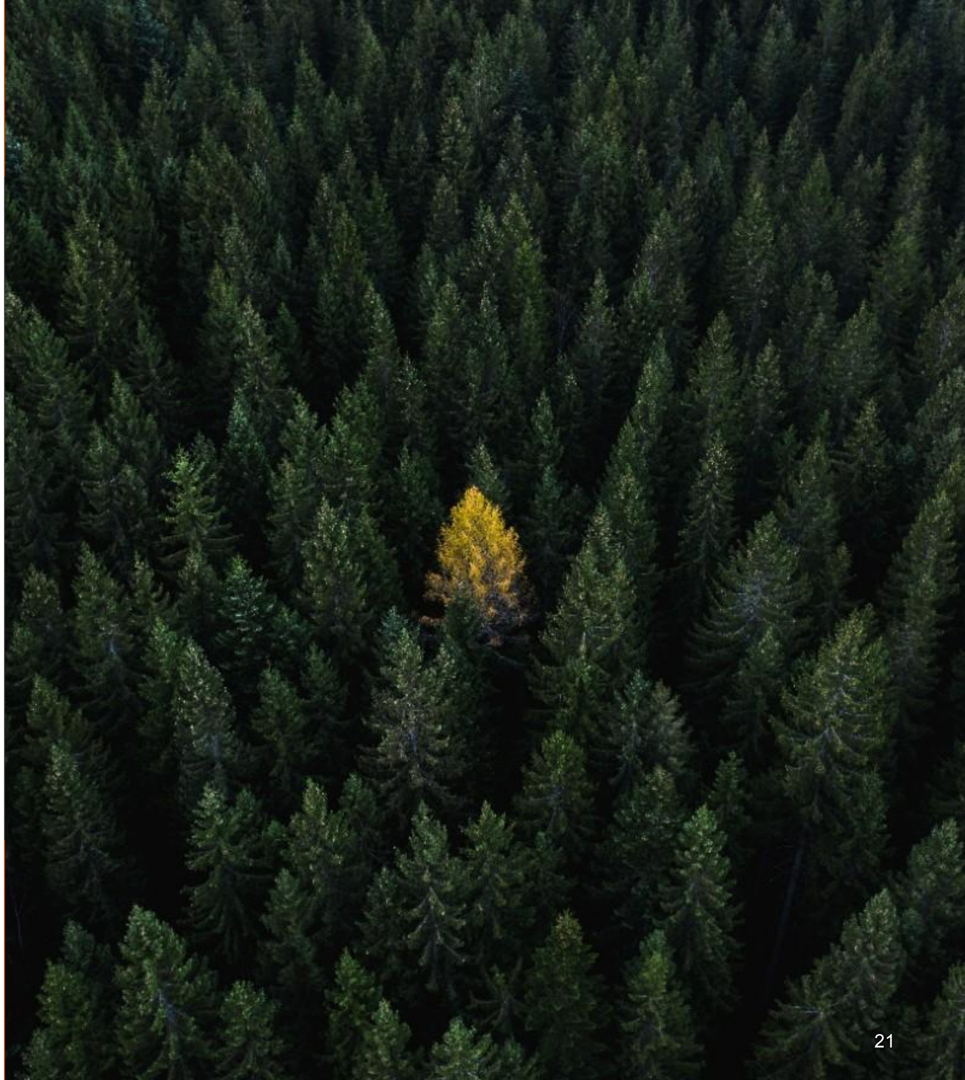
Preparing for financed emissions and scenario analysis



Polling question

? What do you foresee being the most difficult area of compliance for insurers?

- **A** Financial and expenditure metrics
- **B** Disclosing/performing climate scenario analysis
- **C** GHG emissions calculation (including scope 3)
- **D** Identifying impact of climate risks on business strategy
- **E** All of the above

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).

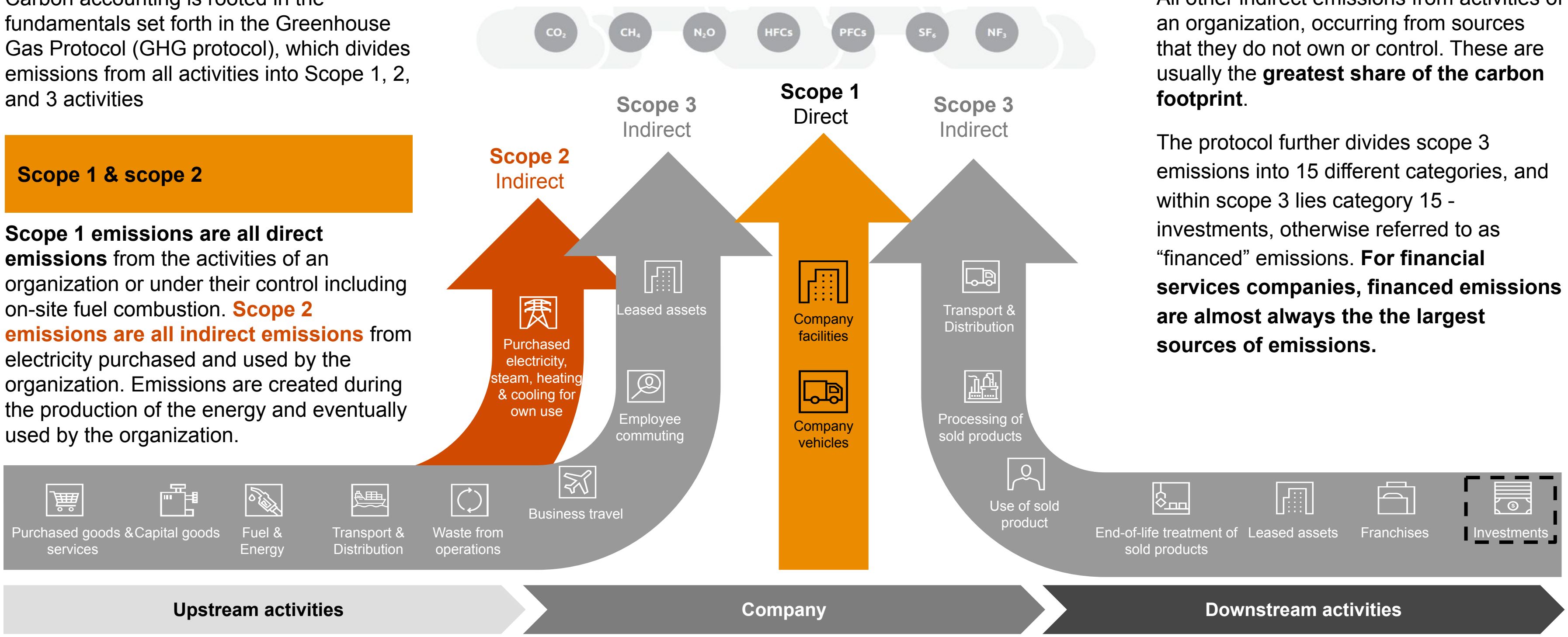
What are financed emissions?

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.

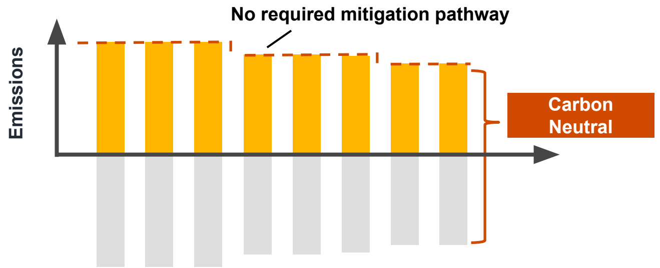
- Operational and some material value chain emissions
- Removals used to neutralize residual emissions
- Set reductions year on year in line with 1.5C
- Targets are validated by an independent body

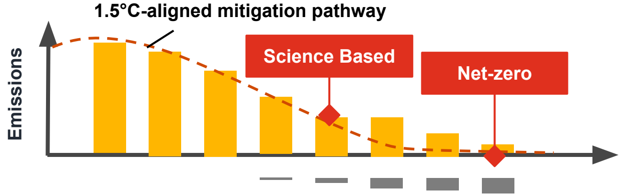
Net-zero targets

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)

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





Offsets or removals | GHG emissions | Removals

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
2. **Underwriting portfolio**
   – Stress the key assumptions and processes used to understand and manage accumulations and exposure
3. **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

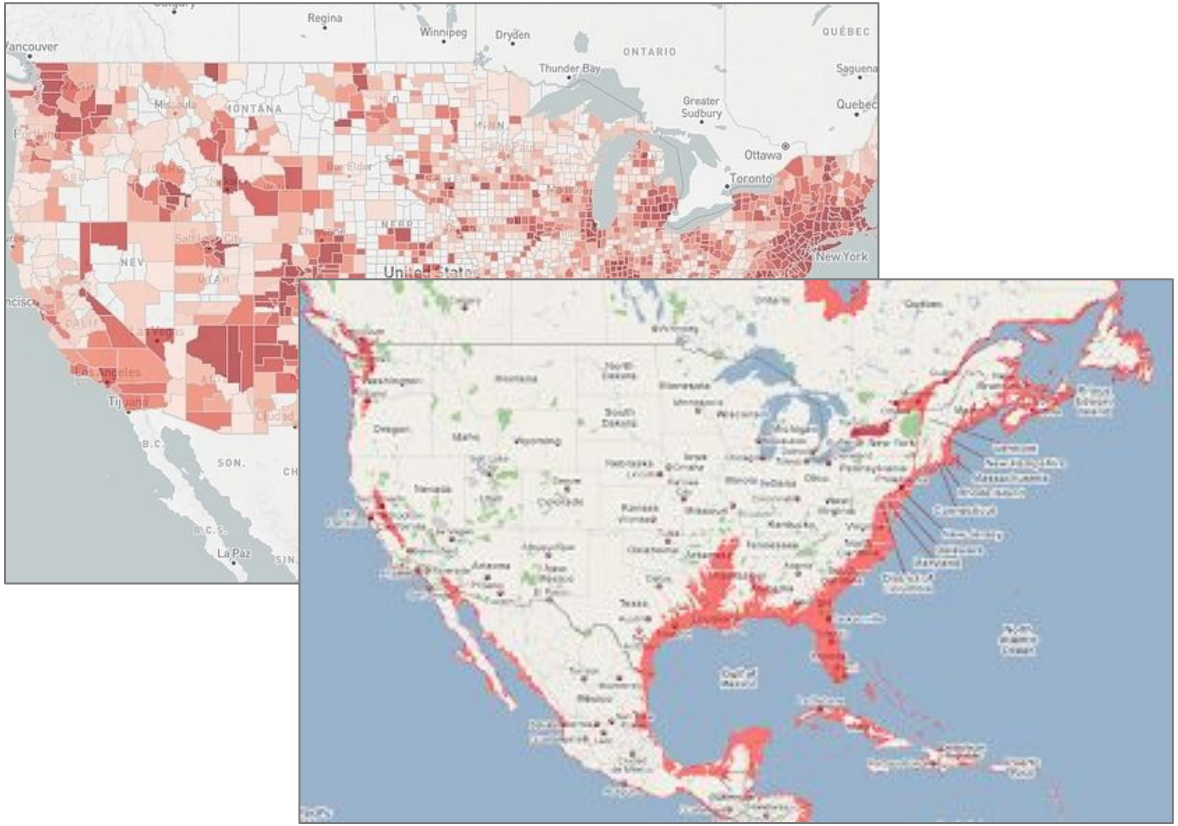
Illustrative climate change impacts on P&C insurance coverages

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

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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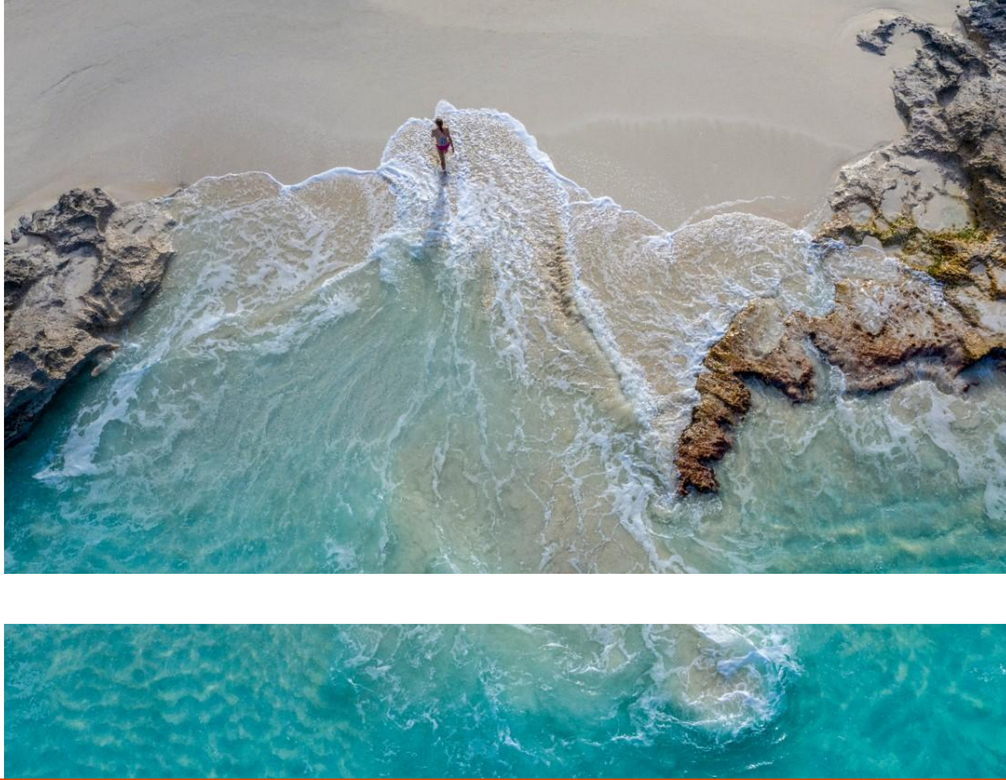
Q&A

Thank you



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