SOA Research INSTITUTE

Catastrophe and Climate

TCFD Best Practices

February 2022

TCFD Best Practices

AUTHORS Steve Bochanski, FSA, CERA, MAAA

Graham Hall, FIA

Hannah Clouser, ASA

SPONSOR Catastrophe and Climate Strategic Research Program Steering Committee

CONTENTS

Executive Summary

Climate change poses both risks and opportunities for businesses, now and in the future. As the earth's mean temperature rises, increasingly frequent and severe environmental disasters are disrupting ecosystems and human health, causing unanticipated business losses, and threatening assets and infrastructure. In response, governments and private sector entities are considering a range of options for reducing global emissions and increasing the resiliency of their businesses to weather events, which could result in disruptive changes across economic sectors and regions in the near term. Given this, there is an increasing push for companies to confirm they manage climate change appropriately and disclose the risks and opportunities that climate change presents to their business. The Task Force on Climate-related Financial Disclosures (TCFD) has created the leading framework being used by firms across all sectors and territories to do so.

Progress Against the TCFD Framework

Support for the TCFD framework has grown significantly since its creation in 2017, with over 50% of companies reviewed in the 2020 TCFD status report disclosing at least one part of the framework in 2020. The framework lays out four main areas of disclosure: Governance, Risk Management, Strategy, and Metrics and Targets. European companies with a market cap over $12.2 billion are the most likely to align with the framework, but companies of all sizes in all countries are increasing their climate disclosures year over year. Industry plays a role in the likelihood to disclose as well, with companies in the Energy and Materials and Building industries leading, and Insurance close behind. Energy and Material and Building industries face well-known/well-documented risks from climate change. This has left those industries exposed to greater scrutiny from the investor community to disclose climate-related risks. It is possible that these pressures have contributed to these industries being ahead in terms of climate disclosures. Insurers are especially likely to disclose their climate-related risks and opportunities within the Strategy area of the TCFD framework.

There are many ways that companies issue disclosures in line with TCFD, including through National Association of Insurance Commissioners (NAIC) Insurance Climate Risk Disclosure Surveys, CDP responses, ESG/Sustainability reports, Annual Reports or other financial disclosures, TCFD indices, and standalone TCFD reports. Regardless of the way insurers disclose, it is expected that disclosure will continue to increase in the future due to growing investor and regulatory pressure. It is also likely that the quality of disclosures will increase as more insurers become aware of best practices and integrate these into their businesses.

Compliant, Leading, and Emerging Practices in the TCFD Framework

For each disclosure area, compliant, leading, and emerging practices exist, where 'compliant' indicates alignment with the TCFD framework, 'leading' represents not only complying with the disclosure but also integrating the management of climate-related risk throughout the organization, and 'emerging' represents practices that are beginning to materialize in the approaches to climate-related risks of top organizations. The following table defines each TCFD disclosures area and provides examples of emerging practices.

Table 1

DISCLOSURE AREA DEFINITIONS AND EMERGING PRACTICE EXAMPLES

	Definition	Example of Emerging Practices
Governance	Disclosure of: • Board oversight and management's role in assessing climate risk	• Adding climate as a standing item on Board agendas • Disclosing an explicit, stated organization structure of responsibilities that includes management and the Board
Strategy	Disclosure of: • Climate-related risks and opportunities over the short-, medium-, and long-term • The impact on an organization's businesses, strategy, and financial planning • Resilience of strategy, which is demonstrated by climate scenario analysis	• Perform scenario analysis using multiple scenarios, including transition risks in a 2°C or lower scenario and physical risks in a 2°C or higher scenario, on an insurer's investment portfolio, underwriting portfolio, and operations
Risk Management	Disclosure of: • The organization's process of identifying and assessing climate-related risks • The organization's process of managing climate-related risks • Integration of climate risk into the organization's overall enterprise risk management (ERM) program	• Fully integrating climate risk procedures into the ERM process • Appropriately considering all nuances of climate-risk, including using appropriate risk models and separating results and mitigation strategy by geography or business segments as needed
Metrics and Targets	Disclosure of: • An organization's measurement and monitoring of climate-related risks and opportunities • Scope 1, 2, and 3 emissions - Scope 1 emission are direct emissions, such as fuel used in company transportation, Scope 2 emissions are emissions related to the purchase of electricity or heat, and Scope 3 emissions include 15 categories relating to all other indirect emissions, such as business travel and financed emissions (emissions of investment portfolios) • Targets set by the organization	• Disclose metrics used by the organization over multiple time horizons for trend analysis, including the extent underwriting activities are aligned with an under 2°C scenario. • Disclose all relevant Scope 3 emissions, including financed emissions • Set at least one target aligned with the Science Based Target initiative (SBTi)

Further, all disclosure areas should follow the seven disclosure principles set by the TCFD; disclosures should:

1. Present relevant information
2. Be specific and complete for managing climate-related risks
3. Be clear, balanced, and understandable
4. Be consistent over time
5. Be comparable among organizations within a sector, industry, or portfolio
6. Be reliable, verifiable, and objective
7. Be provided on a timely basis

While TCFD reports and most other forms of climate disclosures are currently voluntary and are not required to be audited or otherwise validated by third parties, it is not unreasonable to expect this to change. External validation of climate disclosures provides an additional layer of comfort for the users of such reports and helps to limit “greenwashing” (providing misleading information to convey that a company's products or policies are environmentally friendly) and promote transparency and accountability. Leaders in climate disclosures are getting ahead of this trend by publishing accurate and detailed disclosures in all areas, and voluntarily receiving external validation where possible, such as on GHG emissions.

Approaches Insurers are Using to Satisfy the TCFD Framework Recommendations

Using these principles and leading practices guidelines for disclosure, companies should choose the approach that best fits within their business to respond to TCFD, recognizing that there are pros and cons to each approach. The following are examples of ways companies can be responsive to the TCFD framework:

- Issuing a standalone TCFD report is one of the most comprehensive and direct ways to address climate disclosures as recommended in the TCFD framework. The report can be flexible to fit the needs of a company but may be more onerous to produce if resources are limited.
- Providing a TCFD index as part of another report (e.g., a sustainability report) to clearly indicate where disclosures correspond to TCFD is a lighter effort and avoids the need to create an additional report, but if somewhat less robust and requires some work for the reader to find the relevant information.
- Sustainability reports are currently the most common way companies are disclosing information, so this approach is more likely to be aligned with peers, but the reports contain a wide array of information, making it difficult to distill aspects related to TCFD without a TCFD index.
- CDP (formerly the Carbon Disclosure Project) provides a clear framework for disclosure but lacks the ability to highlight key areas because responses cannot be customized.
- Disclosing climate-related information in the annual reports provides visibility to stakeholders but may not allow enough detail to be meaningful.
- NAIC climate risk disclosure surveys allow for insurance-specific climate disclosures, but are less publicized than other reports, making them less visible.

Current leading practice is to produce a standalone TCFD report, and leading companies produce disclosures in more than one place, including a CDP response and a Sustainability report. However, these leading practices will continue to change, especially as regulation continues to evolve.

Market Research of TCFD Alignment

To assess the current state of a sample of insurers, interviews were held with four insurers from the U.S. and Canada with different lines of business to understand the way insurers are using TCFD in their organizations. The researchers found that each insurer interviewed uses TCFD in ways that are unique to their business. One organization stated support for TCFD, but indicated it was only used as a disclosure framework rather than a way to drive strategy or business decisions. Others used TCFD as a way to align the organization's view of climate change or to think about immediate and long-term climate-related risks. All organizations surveyed faced challenges when responding to TCFD, with scenario analysis and setting targets being the most difficult hurdles to meet. Another commonality amongst the insurers was the positive feedback they have received on their reports, with two companies noting that multiple peers have reached out to learn more about their approaches. Overall, the insurers expressed support for the framework and the growing importance of climate-related risk disclosures in their business, regardless of the unique ways TCFD is used within their organizations.

To assess the current state of insurers within the U.S. and Canada, 50 insurers of varying sizes were assessed using publicly available data to determine their level of climate disclosure. The results are presented in a dashboard which can be found linked in section 5 of this report. Overall, findings were generally consistent with the TCFD status reports, with 50% of insurers having at least some aspects of climate disclosures.

Section 1: Introduction and TCFD Literature Review

The Society of Actuaries Research Institute (SOA) is interested in understanding the ways in which companies - insurers, in particular - are responding to the call to action on climate risk management and disclosures. The Task Force on Climate-related Financial Disclosures (TCFD) has provided a framework for climate-related disclosures that encourages consistent disclosures for all organizations. However, the use of this framework, including the quality and quantity of information provided, differs widely across the insurance industry. The intent of the research performed and documented throughout this report is to understand the current state of disclosures and how they are being used within insurance organizations, and to provide a guide to emerging practices in climate-related disclosure in the future.

To understand the way insurers are responding to TCFD, PwC has reviewed three different pieces of literature that discuss the progress of climate disclosures across a variety of companies:

- 2021 Status Report: Task Force on Climate-related Financial Disclosures[1]
- ClimateWise Principles Independent Review 2020[2]
- Climate Risk Disclosure Survey Analysis[3]

The following analysis is a review of these climate disclosures, with a focus on the TCFD guidelines.

1.1 OVERVIEW OF TCFD FRAMEWORK

Following the turmoil of the 2008 financial crisis, in April 2015, the Group of 20 (G20) Finance Ministers and Central Bank Governors asked the Financial Stability Board (FSB) to convene public and private-sector participants to review how the financial sector can take account of climate-related issues in order to avoid climate change causing a crisis like that of 2008. To help this review, FSB established an industry-led Task Force, chaired by Michael Bloomberg, to develop consistent climate-related financial risk disclosures for use by companies, banks, and investors in providing information to stakeholders. The Task Force consists of 32 members from across the G20, representing both preparers and users of financial disclosures.

In December 2016, the FSB's Task Force on Climate-related Financial Disclosures (Task Force or TCFD) issued its draft recommendations and sought public comment on the recommendations as well as certain key issues, receiving over 300 responses. The TCFD final recommendations were released in June 2017, which provide a framework for companies and other organizations to develop more effective climate-related financial disclosures through their existing reporting processes.

The Task Force released 11 recommended disclosures in total, which are related to four main areas as below:

A. Governance: Disclosure of the company's governance around climate-related risks and opportunities.

B. Strategy: Disclosure of the actual and potential impacts of climate-related risk and opportunities on the company's businesses, strategy, and financial planning where such information is material.

C. Risk Management: Disclosure of how the company identifies, assesses, and manages climate-related risks.

---

[1] Task Force on Climate-related Financial Disclosures 2021 Status Report. *Task Force on Climate-related Financial Disclosures,* Sept. 15, 2021, *https://www.fsb.org/wp-content/uploads/P141021-1.pdf* (accessed Oct. 2021).
[2] ClimateWise Principles Independent Review 2020. *Cambridge Institute for Sustainability Leadership,* Feb. 17, 2021, https://www.cisl.cam.ac.uk/resources/sustainable-finance-publications/climatewise-principles-2020 (accessed Sept. 2021).
[3] Climate Risk Disclosure Survey Analysis. *American Academy of Actuaries,* Dec. 4, 2020, https://www.actuary.org/sites/default/files/2021-01/20201204_CRFD_Survey_Analysis_to_NAIC.pdf (accessed Sept. 2021).

D. Metrics and Targets: Disclosure of the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

More details about TCFD recommendations and supporting recommended disclosures can be found in Figure 1.

Figure 1

TCFD RECOMMENDATIONS AND SUPPORTING RECOMMENDED DISCLOSURES

Recommendations and Supporting Recommended Disclosures

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose 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.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	**Recommended Disclosures**	**Recommended Disclosures**	**Recommended Disclosures**
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	a) Describe the organization's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Source: 2021 Status Report: TCFD (see Footnote 1)

In addition, there is supplemental guidance to support organizations across eight specific sectors in developing climate-related financial disclosures consistent with the recommendations and recommended disclosures. Updates or additional guidance are also issued regularly by TCFD to respond to developing topics of interest. Figure 2 provides a mapping of the recommendations (governance, strategy, risk management, and metrics and targets) and recommended disclosures (a, b, c) for which supplemental guidance was developed for specific sectors.

Figure 2

TCFD SUPPLEMENTAL GUIDANCE FOR SPECIFIC SECTORS

Supplemental Guidance for Financial Sector and Non-Financial Groups

		Governance		Strategy			Risk Management			Metrics and Targets		
	Industries and Groups	a)	b)	a)	b)	c)	a)	b)	c)	a)	b)	c)
Financial	Banks			■			■			■	■	
Financial	Insurance Companies				■	■	■	■		■	■	
Financial	Asset Owners				■	■	■	■		■	■	
Financial	Asset Managers				■		■	■		■	■	
Non-Financial	Energy				■	■				■		
Non-Financial	Transportation				■	■				■		
Non-Financial	Materials and Buildings				■	■				■		
Non-Financial	Ag, Food, and Forest Products				■	■				■		

Source: 2021 Annex: TCFD (Task Force on Climate-related Financial Disclosures Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures. October 2021. https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf (accessed Nov. 2021))

For insurance companies, climate-related risks and opportunities constitute a key topic affecting the industry's core business. Users of climate-related financial disclosures are specifically interested in how insurance companies are evaluating and managing climate-related risk and opportunities in their underwriting and investment activities. The Task Force's supplemental guidance for insurance companies applies to the liability (underwriting) side of insurance activities. Also relevant for insurance companies as it relates to their investment activities is the supplemental guidance for asset owners.

The Task Force's recommendations are intended to help build consideration of the effects of climate change into routine business and financial decisions. Adoption of the TCFD framework can help companies demonstrate responsibility and foresight. Better disclosures will lead to more informed and more efficient allocation of capital, and help facilitate the transition to a more sustainable, lower-carbon economy.

It is important to note that, at the time of this report, climate disclosures of all kinds (including TCFD-aligned disclosures) are voluntary in the US, Canada, and most other jurisdictions, and no external assurance is required to be provided over climate disclosures. This fact-pattern increases the risk of "greenwashing", where an organization makes claims about climate-related risks or processes that are misleading or not truthful. It is not unreasonable to expect this to change, potentially soon, and some companies are already proactively seeking external review and assurance over their TCFD and other climate-related reports and disclosures. The researchers see this as a positive trend, which will enhance the reliability and impact of such reports, build trust in the markets, and promote transparency and responsibility.

1.2 WAYS COMPANIES ARE RESPONDING TO TCFD

In practice, companies disclose information aligned with the TCFD recommendations in multiple types of reports such as financial filings, annual or integrated reports, standalone TCFD reports, TCFD compliance matrices and sustainability reports (including Corporate Social Responsibility and Environmental, Social, and Governance (ESG) reports). The level of disclosure and type of report vary widely based on the size of the business, the maturity of the company's ESG program, investor expectations and local regulatory reporting requirements.

Another way to respond to TCFD, either partially or fully, is by responding to other existing climate-related disclosure frameworks. The Task Force considered a broad range of existing frameworks, both voluntary and mandatory. The list below presents several major disclosure frameworks considered by the Task Force in the North America region within which companies could respond to some or all TCFD recommendations:

- National Association of Insurance Commissioners (NAIC) - Insurer Climate Risk Disclosure Survey
- Sustainability Accounting Standards Board (SASB) - Conceptual Framework (2013) and SASB Standards (Various)
- Securities and Exchange Commission (SEC) - Guidance Regarding Disclosure Related to Climate Change
- CDP (formerly the Carbon Disclosure Project) - Annual Questionnaire
- Climate Disclosure Standards Board (CDSB) - Framework for Reporting Environmental Information & Natural Capital
- Climate Disclosure Standards Board (CDSB) - Climate Change Reporting Framework
- Global Reporting Initiative (GRI) - Sustainability Reporting Standards
- International Integrated Reporting Council (IIRC) - International Integrated Reporting Framework
- ClimateWise - ClimateWise members report

1.3 LITERATURE REVIEW OF STATUS REPORTS

1.3.1 2021 STATUS REPORT: TCFD

To assess the current state and evolution of climate-related financial disclosure practices, the Task Force reviewed reports of 1,651 public companies from 69 countries in eight industries over a three-year period - 2018, 2019, and 2020 using artificial intelligence (AI) technology (please see Figure 3 for more details). The AI technology was used to determine whether the reports include information that appears to align with the Task Force's recommendation.

Figure 3

COMPANIES INCLUDED IN TASK FORCE'S REVIEW

AI Review Population Size

Industry	Number
Banking	282
Insurance	132
Energy	267
Materials and Buildings	404
Transportation	158
Ag., Food, and Forest Products	142
Technology and Media	106
Consumer Goods	160
Total	**1,651**

Source: 2021 Status Report: TCFD

The following are the key takeaways and findings from the Task Force's review of company disclosures:

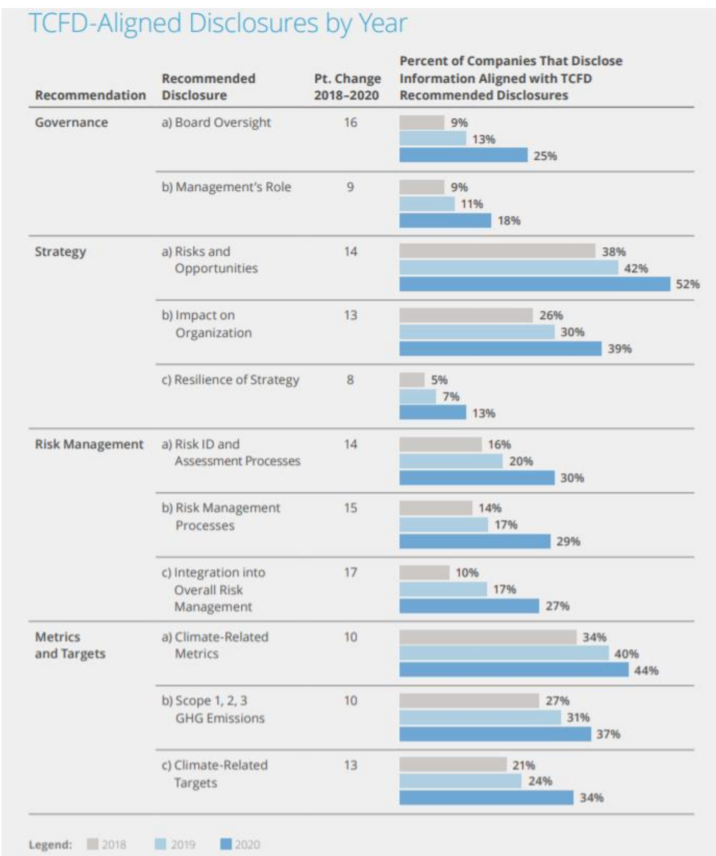
- Disclosure increased more between 2019 to 2020 than in any other previous year, consistent with the growing global momentum around climate-related reporting.
- Over 50% of companies disclosed information on their climate-related risks and opportunities; however, the processes through which they identify, assess, and manage these risks is less transparent.
- Only 13% of companies reported on the resilience of their strategies under different climate-related scenarios. Although this continues to be the recommended disclosure that is least addressed, it continues to increase each year, up from 5% in 2018.
- Larger companies are more likely to disclose TCFD-aligned information.

Figure 4 shows the results by year for each of the Task Force's recommended disclosures. The review found that disclosure increased, on average, across the 11 recommended disclosures by 13 percentage points between 2018 and 2020. However, only 50% of companies reviewed disclosed in alignment with at least three recommended disclosures.

The quality and quantity of TCFD aligned reports have likely increased due to a variety of internal and external factors including investor pressure, employee demands, and looming regulatory pressures. In November 2021, the International Financial Reporting Standards (IFRS) Foundation Trustees announced the creation of the International Sustainability Standards Board (ISSB) to help meet the demand of high quality, transparent, reliable information. While the ISSB has yet to create guidance, this is an indication of more stringent reporting standards yet to come.

Figure 4

TCFD-ALIGNED DISCLOSURES BY YEAR



Source: 2021 Status Report: TCFD

To assess results by company size, the Task Force divided the review population into three categories. Results are presented by Figure 5. On average, 44% of companies with a market capitalization of greater than $12.2 billion disclosed information aligned with the TCFD recommendations in 2020, while the average was only 20% for companies with a market capitalization less than $3.4 billion.

Figure 5

TCFD-ALIGNED DISCLOSURES BY COMPANY SIZE

Disclosure by Market Cap: 2020 Reporting

Recommendation	Recommended Disclosure	<$3.4B Market Cap (540)	$3.4B–$12.2B Market Cap (541)	>$12.2B Market Cap (542)
Governance	a) Board Oversight	12%	24%	39%
	b) Management's Role	10%	18%	27%
Strategy	a) Risks and Opportunities	38%	52%	67%
	b) Impact on Organization	30%	36%	51%
	c) Resilience of Strategy	5%	13%	20%
Risk Management	a) Risk ID and Assessment Processes	16%	31%	42%
	b) Risk Management Processes	17%	30%	41%
	c) Integration into Overall Risk Management	12%	26%	41%
Metrics and Targets	a) Climate-Related Metrics	31%	43%	57%
	b) Scope 1, 2, 3 GHG Emissions	26%	36%	50%
	c) Climate-Related Targets	19%	30%	54%

The numbers in parentheses represent the size of the review population.

Legend: Low to high percentage of disclosure

Source: 2021 Status Report: TCFD

Disclosure also varies across regions, likely due to varying degrees of climate disclosure mandates throughout the world. Companies in the review population were categorized into five regions based on the location of their headquarters to consider potential regional differences. As shown by Figure 6, companies in Europe now have the highest percentages of disclosures across all 11 recommended disclosures; however, there has been encouraging growth in other regions, particularly Asia Pacific which has recorded a 15-percentage point growth since 2018.

Figure 6

TCFD-ALIGNED DISCLOSURES BY REGION

Disclosure by Region: 2020 Reporting

Recommendation	Recommended Disclosure	Asia Pacific (333)	Europe (424)	Middle East and Africa (80)	North America (762)	Latin America (52)
Governance	a) Board Oversight	26%	36%	14%	20%	21%
	b) Management's Role	23%	31%	8%	11%	13%
Strategy	a) Risks and Opportunities	48%	67%	32%	48%	54%
	b) Impact on Organization	39%	50%	26%	35%	31%
	c) Resilience of Strategy	15%	24%	6%	7%	10%
Risk Management	a) Risk ID and Assessment Processes	35%	50%	20%	17%	29%
	b) Risk Management Processes	32%	47%	15%	19%	27%
	c) Integration into Overall Risk Management	32%	41%	11%	18%	21%
Metrics and Targets	a) Climate-Related Metrics	54%	75%	36%	23%	37%
	b) Scope 1, 2, 3 GHG Emissions	42%	64%	26%	21%	25%
	c) Climate-Related Targets	25%	61%	24%	25%	21%

The numbers in parentheses represent the size of the review population.

Legend: Low to high percentage of disclosure

Source: 2021 Status Report: TCFD

A company's industry was also found to impact its disclosure likelihood as shown in Figure 7. In comparing 2020 results across industries, Materials and Buildings companies led on disclosure with Energy and Insurance close behind, while Technology and Media companies lagged behind. The average level of disclosure across the 11 recommended disclosures for fiscal year 2020 was 38% for Materials and Buildings companies, compared to 36% for Energy companies, 34% of Insurers, and 16% of Technology and Media companies.

Figure 7

TCFD-ALIGNED DISCLOSURES BY SECTOR

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%

Recommendation	Recommended Disclosure	Trans-portation (158)	Ag., Food & Forest (142)	Technology & Media (106)	Consumer Goods (160)
Governance	a) Board Oversight	23%	17%	6%	20%
	b) Management's Role	15%	13%	8%	16%
Strategy	a) Risks and Opportunities	49%	50%	25%	41%
	b) Impact on Organization	36%	31%	28%	26%
	c) Resilience of Strategy	6%	11%	7%	8%
Risk Management	a) Risk ID and Assessment Processes	25%	28%	12%	23%
	b) Risk Management Processes	22%	25%	8%	21%
	c) Integration into Overall Risk Management	18%	23%	11%	18%
Metrics and Targets	a) Climate-Related Metrics	41%	48%	26%	42%
	b) Scope 1, 2, 3 GHG Emissions	28%	39%	24%	37%
	c) Climate-Related Targets	28%	41%	25%	35%

The numbers in parentheses represent the size of the review population.

Legend: Low to high percentage of disclosure

Source: 2021 Status Report: TCFD

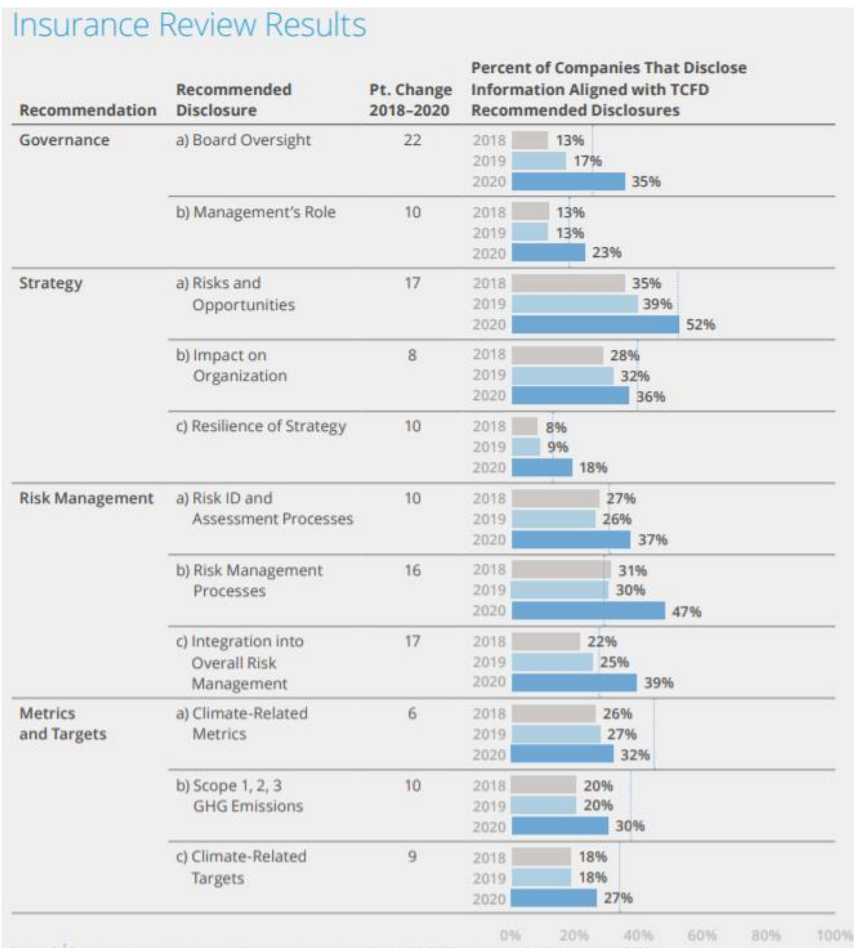
The Task Force reviewed reports from 132 insurance companies in four categories: multiline insurance, property and casualty insurance, reinsurance, and life and health insurance. The insurance companies reviewed ranged in size from about $1 billion to $1.3 trillion in assets, with a median asset size of around $29 billion in assets. The results of this review for these companies are shown in Figure 8.

Based on 2020 reporting, the 132 insurance companies most often disclosed information aligned with the TCFD recommended disclosure *Strategy a) Climate-Related Risks and Opportunities*. Insurance companies' percentage of disclosure in 2020 was greater than or equal to the average across companies in all sectors for seven of the 11 recommended disclosures — and insurance companies exceeded the 2020 average by ten or more percentage points for *Governance a) Board Oversight, Risk Management b) Risk Management Processes*, and *Risk Management c) Integration into Overall Risk Management.*

The insurance industry increased the average level of disclosure by 11 percentage points from 2019 to 2020, which is consistent with feedback that the Task Force received regarding the criticality of climate-related impact assessments for the industry. Insurers now have the highest disclosure percentages for four of the 11 recommended disclosures: *Governance a) Board Oversight, Risk Management a) Risk ID and Assessment Processes*, *Risk Management b) Risk Management Processes*, and *Risk Management c) Integration into Overall Risk Management*.

Figure 8

TCFD-ALIGNED DISCLOSURES FOR INSURANCE COMPANIES



Source: 2021 Status Report: TCFD

1.3.2 THE CLIMATEWISE PRINCIPLES INDEPENDENT REVIEW 2020

ClimateWise, established in 2007, is a growing global network of nearly 40 insurance industry firms which share a commitment to reduce the impact of climate change on society and the insurance society. ClimateWise is a voluntary initiative, driven directly by its members and facilitated by the University of Cambridge Institute for Sustainability Leadership's (CISL's) Centre for Sustainable Finance, which brings business, government, and academia together to identify solutions to critical sustainability challenges.

The ClimateWise Principles, which have led the industry in climate disclosure since 2007, have been aligned with the TCFD Recommendations whilst retaining ambition to lead on informing public policy and raising awareness of climate change among customers and clients. All ClimateWise members are required to submit a report annually which summarizes their actions taken against the ClimateWise Principles across their business activities.

The seven ClimateWise Principles are summarized below:

- Principle 1: Be accountable
- Principle 2: Incorporate climate-related issues into our strategies and investments
- Principle 3: Lead in the identification, understanding and management of climate risk
- Principle 4: Reduce the environmental impact of our business
- Principle 5: Inform public policy building
- Principle 6: Support climate awareness amongst our customers/clients
- Principle 7: Enhance reporting

The annual assessment of the integration of the ClimateWise Principles across member's business activities is based on members' reporting progress. A scoring system is also introduced as a helpful benchmark for members to encourage continuous improvement.

2020 annual member reporting against the TCFD-aligned ClimateWise Principles demonstrated a material increase in the average score, improving by 10%, from 55% in 2019 to 65% in 2020. This improvement in membership score is particularly noteworthy as it has occurred simultaneously with a 25% increase in the membership base with seven new members in 2020.

As in previous years, all members report against the ClimateWise framework, which provides evidence for their progress against all aforementioned principles. Scoring has significantly improved for *Principle 7: Enhance Reporting* this year, with members demonstrating a proactive approach to implement the TCFD recommendations. Around half of all members scored full marks for publicly disclosing their ClimateWise Principles. Over three-quarters of members have integrated key elements of ClimateWise reporting directly into their annual reporting, reflecting the growing demand for TCFD-aligned reporting.

Common practice in integrating the ClimateWise Principles into annual reporting varies by member with some members integrating elements of their ClimateWise report into their annual Corporate Social Responsibility (CSR)/sustainability reports while other members fully publish their ClimateWise Principles report as part of their annual climate-related financial disclosures or TCFD reporting within the annual report.

However, it is also clear from this annual assessment that further progress is needed. A third of members do not make any public disclosure of the ClimateWise Principles report. In addition, members should continue to incorporate the key elements of their ClimateWise Principles report within their annual financial reporting, in line with the TCFD recommendations. A fifth of members do not fully incorporate key elements of ClimateWise reporting into their annual reports.

1.3.3 AMERICAN ACADEMY OF ACTUARIES, NAIC CLIMATE AND RESILIENCY TASK FORCE: CLIMATE RISK DISCLOSURE SURVEY ANALYSIS

The Insurer Climate Risk Disclosure Survey, first introduced by the NAIC in 2010 (although not widely adopted until more recently), was designed to be an insurer reporting mechanism that would provide regulators with a window into how insurers across all lines of insurance assess and manage risks related to climate change.

The eight-question survey asks insurers to provide a description of how they incorporate climate risks into their mitigation, risk-management, and investment plans. Insurers are asked to identify steps taken to engage key constituencies and policyholders on the topic of climate change.

These eight questions are listed below along with keywords.

1. **EMISSIONS -** Does the company have a plan to assess, reduce or mitigate its emissions in its operations or organizations? If yes, please summarize.
2. **RISK PLAN** - Does the company have a climate change policy with respect to risk management and investment management? If yes, please summarize. If not, how do you account for climate change in your risk management?
3. **ASSESS** - Describe your company's process for identifying climate change related risks and assessing the degree that they could affect your business, including financial implications.
4. **RISKS** - Summarize the current or anticipated risks that climate change poses to your company. Explain the ways that these risks could affect your business. Include identification of the geographical areas affected by these risks.
5. **INVEST** - Has the company considered the impact of climate change on its investment portfolio? Has it altered its investment strategy in response to these considerations? If so, please summarize steps you have taken.
6. **MITIGATE** - Summarize steps the company has taken to encourage policyholders to reduce the losses caused by climate change-influenced events.
7. **ENGAGE** - Discuss steps, if any, the company has taken to engage key constituencies on the topic of climate change.
8. **MANAGE** - Describe actions the company is taking to manage the risks climate change poses to your business including, in general terms, the use of computer modeling. If Yes, please summarize what actions the company is taking and in general terms the use if any of computer modeling in response text box.

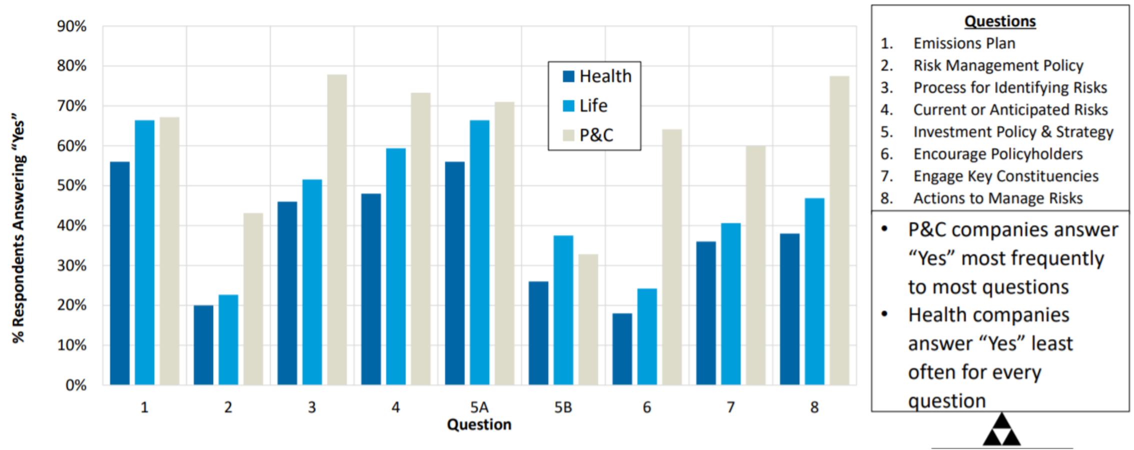
Source: Climate Risk Disclosure Survey Guidance Reporting Year 2020 (see Footnote 13)

Insurers are currently required to file a disclosure if they report more than $100 million on their annual Schedule T (Premiums and Annuity Considerations) filing with the NAIC in any of the six participating states - California, Connecticut, Minnesota, New Mexico, New York, and Washington, and are encouraged to submit a survey even if they are not required to.

In 2019 survey responses, around 10 - 15% of companies provided robust responses (as determined by systemic, qualitative analysis), 10-15% of companies provided some details and 70 - 80% of companies indicated little of their assessment of climate risk or plans for management of that risk. Figure 9 further presents insurance companies' responses by question and business type.

Figure 9

NAIC SURVEY RESPONSES "YES" BY QUESTION AND BUSINESS TYPE



Source: American Academy of Actuaries, NAIC Climate and Resiliency Task Force: Climate Risk Disclosure Survey Analysis (see Footnote 3)

The American Academy of Actuaries (AAA), who analyzed NAIC survey responses, also uses length of the response as another indicator of attention to the questions asked. The researchers note that length of response may not necessarily correspond to quality of response and may instead be indicative of companies having larger teams who are able to spend more time and resources on their responses. This seems to be borne out in the AAA's review - in all lines of business, the largest companies file longer responses than small and midsize companies, and largest health companies file particularly lengthy responses. Size of business appears to be one driver for attention given to the survey with the largest 25% of companies in each line of business providing the most robust responses. More details are shown by Figure 10 below.

Figure 10

NAIC SURVEY RESPONSES - LENGTH BY COMPANY SIZE

Median Length of Survey Response (# of Words)

	Health	Life	Property & Casualty
Smallest 25% of Companies	519	414	530
Middle 50% of Companies	450	555	720
Largest 25% of Companies	1,975	1,100	1,265

Source: American Academy of Actuaries, NAIC Climate and Resiliency Task Force: Climate Risk Disclosure Survey Analysis

1.4 SUMMARY OF LITERATURE REVIEW

TCFD provides strong guidance on climate risk disclosures for all industries, and there are multiple ways that companies are responding to this guidance. Overwhelmingly, sustainability reports are used as a way to disclose, but disclosure can also be accomplished through financial filings, standalone TCFD reports, and CDP responses, to name a few. The level of disclosures varies widely by company size, region, and industry. More robust disclosures are typically seen by larger companies, European companies, and Energy companies comparatively.

Specific to insurance, the 2021 Status Report of TCFD reviewed 132 insurers and found that on average, 34% of companies disclosed information aligned with TCFD recommendations across all categories in 2020. This number was a significant increase from 2019, where only 26% of companies disclosed information aligned with TCFD recommendations, and places insurers only 4 percentage points below the average disclosure rate for the leading industry. The number of insurers disclosing information also varies widely by the type of disclosure - over 50% of companies disclosed information on climate risks and opportunities, but only 18% of companies disclosed the resilience of their strategy.

The ClimateWise Principles Independent Review 2020 also provides an update on the progress of the 33 insurers, reinsurers, and brokers that are ClimateWise members. The review found that members have made steady increases in their disclosures year over year, with a 10% increase from 2019 to 2020. There has been a particular increase in Principle 7: Enhanced Reporting this year, with over 75% of members integrating key elements of ClimateWise into their annual reporting. This increase in reporting is aligned with the increase shown in the 2020 Status Report of the TCFD.

The NAIC adopted the Insurer Climate Risk Disclosure Survey in 2010 as a way to provide regulators with a view into how insurers are assessing and managing climate change. The American Academy of Actuaries NAIC Climate and Resiliency Task Force reviewed 2019 survey responses and found that 10-15% of respondents provide robust responses on their assessment of climate risk or plans for risk management, and another 10-15% of respondents provided some detail. The reviews also found that larger companies were likely to have the longest responses in the survey (indicating greater detail provided and therefore more disclosure), in line with the 2021 Status Report of the TCFD findings of larger companies being more likely to disclose in alignment with TCFD.

In summary, all three pieces of literature analyzed show that there is an increase in climate-related disclosures by insurers year over year, but the percentage of companies fully disclosing is under 50%. It is expected that this percentage will continue to increase given the trend of the prior years and from growing investor and regulatory pressure. As more insurers continue to align with TCFD, it can be expected that the quality of these disclosures will get further scrutiny. The following sections of this report will further explore the level of disclosures across insurers in the United States (US) and Canada and will provide insurers with a best practice framework to follow when responding to TCFD guidelines.

Section 2: TCFD Assessment Framework: Compliant, Leading, and Emerging Practices

As previously discussed, there are numerous ways to respond to TCFD, all of which may be appropriate if performed correctly. However, more advanced companies will generally have a strong company culture of integrating climate-related risks and opportunities throughout all aspects of their organization, and their disclosures typically take the form of stand-alone TCFD reports. The following sections define compliant, leading, and emerging practices for each aspect of TCFD guidance areas[4], as well as best practices when writing climate disclosures and emerging areas of climate disclosure assurance. 'Compliant' practices represent compliance with the TCFD guidelines, 'leading' represents strong current practices closely align with the spirit of TCFD, providing full disclosure of climate-related practices, and 'emerging' represent a step further than leading trends, showing practices that are beginning to materialize in the climate disclosures, showing full alignment with the spirit and intent of the TCFD framework.

2.1 COMPLIANT, LEADING, AND EMERGING PRACTICES IN TCFD GUIDANCE AREAS

2.1.1 GOVERNANCE

The TCFD guidelines include Governance as the first disclosure area and recommend the disclosure of the Board's oversight of climate-related risks and opportunities and management's role in assessing and managing climate-related risks and opportunities. Considerations of Board oversight include the frequency the Board is informed of climate issues, the involvement in assessing climate strategy and risk management, and approval and monitoring of climate targets. Management should have roles explicitly assigned to climate risks, and a formalized organizational structure should be in place. Understanding the role an organization's management and Board play in overseeing climate-related issues helps readers to evaluate whether these issues receive appropriate attention at the organization's top levels.

Aviva is an example of an insurer with leading governance practices and disclosures. In their 2020 Climate-related financial disclosures report[5] they describe their governance process in the Board and management, noting multiple committees of the Board that have responsibility for different areas of climate change, including review and approval of their climate change plan. Management is assigned clear roles and responsibilities and there is a stated management structure that includes the Board and management. Their Board and senior managers also received climate training as part of their regular training programs.

The following table details the compliant, leading, and emerging practices in governance.

---

[4] Recommendations of the Task Force on Climate-related Financial Disclosures Guidelines. *Task Force on Climate-relate Financial Disclosures,* Jun. 15, 2017, https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf (accessed Sept. 2021).

[5] https://www.aviva.com/sustainability/reporting/climate-related-financial-disclosure/

Table 2

COMPLIANT, LEADING, AND EMERGING PRACTICES FOR GOVERNANCE PILLAR

Governance	Compliant	Leading	Emerging
a) The board's oversight of climate-related risks and opportunities			
Frequency at which the board are informed on climate-related issues	At least annually	At least quarterly	Standing item on board agendas
The board consider climate-related issues:	■	■	■
• when examining and assessing strategy, risk management and metrics and targets		■	■
• when examining and assessing major plans of action, annual budgets, and business plans		■	■
• when setting the organization's performance objectives, monitoring implementation and performance, and overseeing major capital expenditures, acquisitions, and divestitures		■	■
• when monitoring and overseeing progress on any climate-related metrics and targets			
b) Management's role in assessing and managing climate-related risks and opportunities	■	■	■
Climate-related responsibilities including assessing, managing, and monitoring climate-related issues are assigned to management-level positions or committees.		■	■
There is a formalized process by which management is informed about, is assigned, and monitors climate-related issues.	■	■	■
The assigned management positions or committees report to the board and/or board committees.		■	■
There is a stated organizational structure of responsibilities on climate-related issues that includes both the board and management.			

■ Contained in disclosures □ Not contained in disclosures

2.1.2 STRATEGY

The next area of the TCFD framework is Strategy, which recommends disclosure of climate-related risks and opportunities over the short-, medium-, and long-term, the impact of these risks and opportunities on the organization's businesses, strategy, and financial planning, and the resilience of the organization's strategy, taking into consideration different climate-related scenarios. Climate-related risks and opportunities identified should take into account time horizons relevant to the organization and there should be a formalized process of identification of these risks. Risks and opportunities disclosed should explain the potential impact across the organization in areas such as products and services, investments, operations, and access to capital and should be split by sector, division, or geography. Emerging practice within scenario analysis is to use multiple climate scenarios in multiple areas of the business, and disclose the inputs and results of the analysis, including ways that the scenario analysis has influenced business strategy. Understanding this information allows readers to make expectations on the future performance of an organization.

Allianz is an example of an insurer leading in the Strategy pillar. In their 2020 Group Sustainability Report[6] they describe time horizons considered, multiple risks and opportunities, and the impact on their organizations and their investors. They note, *"We are particularly impacted [by climate change] in two principle ways, both of which can influence the ability of assets to generate long-term value: (1) As an insurer providing insurance policies, e.g., covering health impacts, property damage, or litigation claims and secondly through changes in the sectors and business models it underwrites. (2) As a large-scale institutional investor with significant stakes in economies, companies, infrastructure and real estate that are, or will be, affected by the physical impact of climate change and by the transition to a low-carbon economy."* They also performed and disclosed a comprehensive scenario analysis of their investment portfolio, using a 1.5°C scenario for transition risk and a 4°C scenario for physical risk. Emerging practice is to take the scenario analysis one step further to also include the impact on underwriting portfolio and overall operations, as Allianz states they plan to do in their next report.

The following table details the compliant, leading, and emerging practices in Strategy.

Table 3

COMPLIANT, LEADING, AND EMERGING PRACTICES FOR STRATEGY PILLAR

Strategy	Compliant	Leading	Emerging
a) The climate related risks and opportunities the organization has identified over the short, medium, and long term			
There is a description of what the organization considers to be relevant short-, medium-, and long-term time horizons.	■	■	■
Time horizons take the useful life of the organization's assets, insurance portfolio, and investments into consideration.		■	■
Specific climate-related issues for each time horizon that could have a material financial impact are disclosed.	■	■	■
There is a formalized process for identifying climate-related risks and opportunities.		■	■
• The process includes vetting identified risks and opportunities with multiple stakeholders within the company.		■	■
TCFD tables 1 and 2, which are tables identifying potential categories of climate-related risks and opportunities, are used to determine climate-related risks and opportunities within the listed categories.	■	■	■
A process is used to determine which risks and opportunities could have a material impact on the organization.		■	■
Risks and opportunities are split out by sector and/or geography, or there is an explanation of why this is not relevant.		■	■

[6] Allianz Group Sustainability Report 2020. *Allianz Sustainability,* 2020, https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/sustainability/documents/Allianz_Group_Sustainability_Report_2020-web.pdf (accessed Dec 2021).

Strategy	Compliant	Leading	Emerging
b) The impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning			
Building on recommended disclosure a) Risks and Opportunities, the organization discusses how identified climate-related issues have affected its business, strategy, and financial planning.	■	■	■
The impact on its businesses, strategy, and financial planning in the following areas: • Products and services • Supply chain and/or value chain • Investment in research and development • Operations (including types of operations and location of facilities) • Acquisitions or divestments • Access to capital	Cover at least 3 of the areas	Cover all the areas	Cover all the areas
The impact on financial performance (e.g., costs and revenues) and financial position (e.g., assets and liabilities) is described.		■	■
Organizations that have either GHG emissions reduction commitments, have agreed to set commitments, or are required to set commitments describe their plans for transitioning to a low-carbon economy. This includes GHG emissions targets and specific activities intended to reduce GHG emissions in their operations and value chain to support the transition.		■	■
Insurance companies describe the potential impacts of climate-related risks and opportunities on their core businesses, products, and services.	■	■	■
Insurance companies further describe: • Information at the business division, sector, or geography levels • How the potential impacts influence client, cedent, or broker selection • Whether specific climate-related products or competencies are under development, such as insurance of green infrastructure, specialty climate-related risk advisory services, and climate-related client engagement		■	■
There is a description of how climate-related issues serve as an input to the financial process, the time period(s) used, and how these risks and opportunities are prioritized.		■	■
The disclosure reflects a holistic picture of the interdependencies among the factors that affect the ability to create value over time.			■

Strategy	Compliant	Leading	Emerging
c) The resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario			
Scenario analysis is performed to discover how resilient the organization’s strategies are to climate-related risks and opportunities.	Qualitative at minimum	Quantitative amongst at least one business area (investments, underwriting, or operations)	Quantitative analysis performed on underwriting, investments, and operations
• This analysis considers:	Multiple climate scenarios across warming potentials including transition risks in a 2°C or lower scenario and physical risks in a 2°C or higher scenario	Multiple climate scenarios across warming potentials and across different scenario sources (e.g., IEA, IPCC, NGFS etc.) including transition risks in a 2°C or lower scenario and physical risks in a 2°C or higher scenario	Multiple climate scenarios across warming potentials and across different scenario sources (e.g., IEA, IPCC, NGFS etc.) including transition risks in more than one low-carbon in a 2°C or lower scenario and physical risks in a 2°C or higher scenario
Using results of the scenario analysis:			
• The organization discusses where they believe its strategies may be affected by climate-related risks and opportunities and how its strategies might change to address such potential risks and opportunities	■	■	■
• The organization discusses the potential impact of climate-related issues on financial performance and financial position		■	■
There is a discussion on the climate-related scenarios and associated time horizon(s) considered within the scenario analysis.	■	■	■
Insurance companies perform climate-related scenario analysis on their underwriting activities.		■	■

Strategy	Compliant	Leading	Emerging
Insurance companies disclose the description of the climate-related scenarios used, including the following: • the critical input parameters • assumptions and considerations • analytical choices • time frames used for the climate-related scenarios, including short-, medium-, and long-term milestones		■	■

■ Contained in disclosures □ Not contained in disclosures

2.1.3 RISK MANAGEMENT

The third disclosure area of the TCFD framework is Risk Management, which encourages disclosure of the organization's process for identifying and assessing climate-related risks, managing the risks, and the integration into the organization's overall risk management. Processes should include risk identification on insurance portfolio by geography, business division, or product segment. Emerging practice also includes identifying, assessing, and managing transition risks resulting from a reduction in insurable interest and liability risks that could intensify due to a possible increase in litigation. Disclosures should also include a description of how climate-related risks fit into the organization's overall ERM program. These disclosures support a reader in analyzing an organization's risk profile and risk management activities.

Zurich is an example of an insurer whose risk management practices and disclosures embody leading trends. Within Zurich's TCFD report[7], the organization comments on identification, assessment, and management of physical, transition, and liability risks within their underwriting and investment portfolios. The process for climate risk is also deeply integrated into their ERM process, noting that the same objectives of informed and disciplines risk taking are followed.

The following table details the compliant, leading, and emerging practices in Risk Management.

Table 4

COMPLIANT, LEADING, AND EMERGING PRACTICES FOR RISK MANAGEMENT PILLAR

Risk Management	**Compliant**	**Leading**	**Emerging**
a) The organization's processes for identifying and assessing climate-related risks			
There is a process for identifying climate-related risks and which types of risks are included (regulatory risks e.g., limits on emissions and other risks).	■	■	■
• This process includes identification of climate-related risks on re-/insurance portfolios by geography, business division, or product segments.		■	■
• This process includes identification of physical risks from changing frequencies and intensities of weather-related perils		■	■

[7] Task Force on Climate-related Financial Disclosures (TCFD) report. *Zurich Sustainability,* 2020, https://www.zurich.com/en/sustainability/strategy/tcfd (accessed Dec. 2021).

Risk Management	Compliant	Leading	Emerging
• This process includes identification of transition risks resulting from a reduction in insurable interest due to a decline in value, changing energy costs, or implementation of carbon regulation		■	■
• This process includes identification of liability risks that could intensify due to a possible increase in litigation			■
There is a process for assessing climate-related risks, and their size, scope, and the relative significance in relation to other risks.	■	■	■
• This process includes assessment of climate-related risks on re-/insurance portfolios by geography, business division, or product segments.		■	■
• This process includes assessment of physical risks from changing frequencies and intensities of weather-related perils.		■	■
• This process includes assessment of transition risks resulting from a reduction in insurable interest due to a decline in value, changing energy costs, or implementation of carbon regulation.		■	■
• This process includes assessment of liability risks that could intensify due to a possible increase in litigation			■
There is a clear definition of risk terminology used.	■	■	■
b) The organization's processes for managing climate-related risks			
There is a process for managing climate-related risks.	■	■	■
• This process includes how to make decisions to mitigate, transfer, accept, or control those risks.		■	■
There is a process for prioritizing climate-related risks.	■	■	■
• This process includes how materiality determinations are made within its organization.		■	■
Insurance companies use key tools or instruments, such as risk models, to manage climate-related risks in relation to product development and pricing.		■	■
• The model includes a range of climate-related events, and there is a management process for the results of the model.			■
c) How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management			

Risk Management	Compliant	Leading	Emerging
There is a description of how processes for identifying, assessing, and managing climate-related risks are integrated into the overall risk management function.	Processes are done separately, but results are communicated with overall ERM function	Processes for climate risk are integrated into the overall ERM process, but process vary from standard procedure	Processes for climate risk are fully integrated into the overall ERM process and nuances are appropriately considered

■ Contained in disclosures □ Not contained in disclosures

2.1.4 METRICS AND TARGETS

The final area of the TCFD framework is Metrics and Targets, which involves an organization's measurement and monitoring of climate-related risks and opportunities. Recommended disclosures include the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process, the targets used by the organization to manage these risks and opportunities, and their performance against targets. Metrics disclosed should be relevant and applicable to the organization and should include historical periods for trend analysis. All emissions (Scope 1, Scope 2, and Scope 3) should be calculated in line with the GHG protocol, verified by a third party, and disclosed at least annually. Targets relating to emissions of water, energy, or other climate-related areas should be clearly disclosed. Emerging practice is to have multiple goals, including at least one goal approved by SBTi. This information allows readers to assess the organization's potential risk-adjusted returns, ability to meet financial obligations, general exposure to climate-related issues, and progress in managing or adapting to those issues.

Axa's 2021 climate report[8] is an example of a leading disclosure in metrics and targets. They disclose a wide variety of metrics that are used to measure against, have set targets specific to their investment portfolio in line with the Net Zero Asset Owner Alliance (NZAOA), and describe a pathway to achieve these targets through divestments, green investments, and underwriting restrictions. Emerging practice is to set ambitious targets not only in line with NZAOA, but also in line with SBTi.

The following table details the compliant, leading, and emerging practices in metrics and targets.

Table 5

COMPLIANT, LEADING, AND EMERGING PRACTICES FOR METRICS AND TARGETS PILLAR

Metrics and Targets	Compliant	Leading	Emerging
a) The metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process			
There are key metrics used to measure and manage climate-related risks and opportunities.	■	■	■
• These metrics include climate-related risks associated with water, energy, land use, and waste management, where relevant and applicable.		■	■

[8] 2021: Climate report: the decisive decade, *Axa Sustainability,* 2021, https://www-axa-com.cdn.axa-contento-118412.eu/www-axa-com/db5d9f4b-4bb9-4029-ad51-b9e0e20301fb_2021_Climate_Report.pdf (accessed Dec. 2021).

Metrics and Targets	Compliant	Leading	Emerging
• These metrics are in line with cross-industry metric categories.		■	■
Historical periods of metrics are used for trend analysis.		■	■
Where climate-related issues are material, metrics are incorporated into remuneration policies.		■	■
If applicable to the business, internal carbon prices and opportunity metrics such as revenue from products and services designed for a lower-carbon economy are used.			■
Insurance companies describe extent to which underwriting activities are aligned with a well below 2°C scenario, indicating which insurance underwriting activities (e.g., lines of business) are included.			■
b) Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks			
Scope 1 and Scope 2 GHG emissions are calculated and disclosed at least annually.	■	■	■
Scope 3 emissions are calculated and disclosed at least annually.	Some relevant categories are disclosed	Most relevant categories are disclosed	All relevant categories, including financed emissions, are disclosed
Insurance companies disclose weighted average carbon intensity or emissions associated with commercial property and specialty lines of business.			■
GHG emissions are calculated in line with the GHG protocol methodology.	■	■	■
Where not apparent, a description of the methodologies used to calculate or estimate the metrics is provided.	■	■	■
Generally accepted industry specific GHG efficiency ratios are calculated and disclosed.		■	■
GHG emissions and associated metrics for historical periods are disclosed to allow for trend analysis.		■	■
All emissions calculated are assured by an independent third-party auditor		■	■
c) The targets used by the organization to manage climate-related risks and opportunities and performance against targets			
The number of climate-related targets set. The target may be related to GHG emissions, water usage, energy usage, etc.	At least one	More than one	More than one, including at least one target in line with the SBTi
• The targets are in line with anticipated regulatory requirements, market constraints, or other goals including efficiency or financial goals, financial loss tolerances, avoided GHG emissions through the entire product life cycle, or net revenue goals for products and services designed for a lower-carbon economy			■

Metrics and Targets	Compliant	Leading	Emerging
• The targets are in line with cross-industry metric categories	■	■	■
For set targets, it is clear:			
• Whether targets are absolute, or intensity based	■	■	■
• Timeframes over which the target(s) apply	■	■	■
• Base year from which progress is measured	■	■	■
• What KPIs are used to assess progress against targets	■	■	■
For medium-term or long-term targets, appropriate interim targets are included.		■	■

■ Contained in disclosures □ Not contained in disclosures

2.2 BEST PRACTICES IN TCFD DISCLOSURES

In addition to compliant, leading, and emerging practices around the TCFD guidelines, there are also best practices set for disclosures defined by the TCFD, which should be followed by all organizations to produce a good disclosure. These practices are described below.

Table 6

BEST PRACTICES IN TCFD DISCLOSURES

Disclosure Principles
Principle 1: Disclosures should present relevant information
The information provided is specific to the potential impact of climate-related risks and opportunities on the organization's markets, businesses, corporate or investment strategy, financial statements, and future cash flows.
Immaterial or redundant material is eliminated from the disclosure, except for cases when a particular risk or issue attracts investor and market interest, in which case the risk or issues can be included and stated as immaterial, to show it has been considered.
There is sufficient detail to enable users to assess the organization's exposure and approach to addressing climate-related issues.
There are no boilerplate disclosures that do not add value to the user's understanding of issues.
Information is disclosed provides information from the perspective of the potential impact of climate-related issues on value creation, taking into account and addressing the different time frames and types of impacts.
Principle 2: Disclosures should be specific and complete for managing climate-related risks
The organization provides a thorough overview of its exposure to potential climate-related impacts, the potential nature and size of such impacts, its governance, strategy, processes for managing climate-related risks, and performance with respect to managing risk and opportunities.
Disclosures contain historical and future oriented information in order to allow users to evaluate their previous expectations relative to actual performance and assess possible future financial implications.
Disclosures contain an explanation of the definition and scope applied for quantitative information.
Any scenario analyses are based on data or other information used by the organization for investment decision making and risk management.

Disclosure Principles
The organization demonstrates the effect on selected risk metrics or exposures to changes in the key underlying methodologies and assumptions, both in qualitative and quantitative terms.
Principle 3: Disclosures should be clear, balanced, and understandable
Disclosures are sufficiently granular to inform sophisticated users, but also provide concise information for those who are less specialized.
Disclosures show an appropriate balance between qualitative and quantitative information and use text, numbers, and graphical presentations as appropriate.
There are fair and balanced narrative explanations to provide insight into the meaning of quantitative disclosures, including changes or developments over time.
Disclosures include straightforward explanations of issues, with terms used in the disclosures explained or defined for a proper understanding of users.
Principle 4: Disclosures should be consistent over time
Disclosures are generally consistent over time.
Disclosures use consistent formats, language, and metrics from period to period.
Disclosures are also consistent across different reports and documents within the company.
• If it is not possible to be consistent due to the evolution of practices, changes in disclosures and related approaches or formats are explained.
Principle 5: Disclosures should be comparable among organizations within a sector, industry, or portfolio
Disclosures allow for meaningful comparisons of strategy, business activities, risks, and performance across organizations and within sectors and jurisdictions.
The level of detail provided in disclosures enables comparison and benchmarking of risks across sectors and at the portfolio level, where appropriate.
When possible, placement of disclosures is aligned with peers to facilitate easy access to information within the same industry.
Disclosures follow relevant methodologies or standards used within the industry.
Principle 6: Disclosures should be reliable, verifiable, and objective
Disclosures provide high-quality reliable information and are accurate and neutral.
Disclosures are based on objective data and use industry-leading measurement methodologies, which include common industry practice as it evolves.
Disclosures are subject to internal governance processes that are the same or substantially similar to those used for financial reporting.
Principle 7: Disclosures should be provided on a timely basis
Information is disclosed in a timely manner using appropriate media, at least annually within the mainstream financial report.
If climate-related risks result in disruptive events that cause material impacts, there is a timely disclosure of this impact.
In addition to mainstream financial reports, a separate standalone TCFD report is produced and updated on a regular basis.

2.3 CLIMATE DISCLOSURE REVIEW AND ASSURANCE OR OTHER INDEPENDENT VALIDATION

As described in section 1.2, at the time of this report, climate disclosures are mostly voluntary and not required by regulatory bodies in the U.S. and Canada (and most other jurisdictions). Similarly, there is not currently a requirement for climate-related disclosures to be validated by an independent third-party. Concerned parties might say that this increases the risk of greenwashing and potentially harms the usefulness and reliability of such reports.

Sensitivity to and awareness of greenwashing in the market is increasing, and investors and activists are pushing organizations to go deeper and disclose material risks and plans for reaching ambitious goals rather than make surface level statements and unsupported claims. There is an enhanced focus on this in regulatory circles as well, as evidenced by the SEC's use of comment letters to organizations when their climate risks disclosed in external reports don't align with their 10K risk factors. Given these developments, it is not unreasonable to think that external validation of climate disclosure may soon become mandatory, though the form and fashion of the mandate is yet to be seen.

Based on these trends and leading indicators, the researchers consider receiving independent validation of climate-related disclosures to be an emerging practice. Some companies are already beginning to get ahead by proactively having their emissions and other climate-related disclosures assured by third parties, concluding that the methodology used, and numbers reported are accurate. This trend is likely to continue and expand as investors, regulators, and consumers increasingly rely on such disclosures to make informed investing and purchasing decisions.

Section 3: Approaches Taken to Satisfy TCFD

Insurers currently report climate disclosures in a variety of ways including but not limited to annual reports, NAIC surveys, sustainability reports, CDP responses, TCFD indices, and standalone TCFD reports. These disclosures align to the TCFD framework to varying degrees, with some methods of disclosure more closely aligning than others. In this section, six different approaches taken to satisfy the TCFD framework are reviewed, and the advantages and disadvantages, level of sophistication, and examples of insurers using each method of disclosure are provided.

The examples given in each section below are illustrative of the ways insurance companies are using different mediums to align with the TCFD framework and do not necessarily represent best practice within the industry. We note that there are other methods insurers could use to report on their climate-related risks and this list is not exhaustive and may change over time as practices develop and mature.

3.1 ANNUAL REPORTS

Annual reports (to the extent they are produced) are a key document for disclosing material risks. Risk factors are required to be disclosed within the document, creating an area where insurers are able to comment on their exposure to climate risk. Additionally, companies can integrate other pieces of their climate change strategy into the commentary within the report as they see fit.

3.1.1 PROS

- An annual report is very visible to investors and other external and internal stakeholders. Therefore, noting climate change risks in this report brings the disclosure to the forefront.
- If the company has additional disclosures on climate change risks, such as a sustainability report, CDP response, or a standalone TCFD report, alignment within the annual report is best practice, and it is becoming increasingly scrutinized by the Security Exchange Commission (SEC) in the United States to assess if different disclosures are not in alignment. Disclosing risks within the annual report can support avoidance of inconsistencies.

3.1.2 CONS

- Commentary within annual reports is generally at a higher level and may not give detailed meaningful insights into the climate risk a company may face.
- Annual reports are not aligned with the TCFD framework, and the focus is often on types of risk factors and management strategies rather than a comprehensive framework on governance, strategy, risk management, and metrics and targets.
- The focus of the annual report is not to highlight climate change, so it may be difficult to differentiate the important takeaways on climate from other objectives and conclusions about the business.

3.1.3 EXAMPLES

- Progressive notes the risk of climate change within their risk factors of their annual report, a disclosure that aligns to *Strategy a)* of the TCFD framework, stating, *"Our insurance operating results may be materially adversely affected by severe weather or other catastrophe events, and changing climate conditions may be exacerbating these impacts."*[9]
- Prudential discusses Board oversight of climate risk within their annual report[10], in alignment with *Governance a)* of the TCFD framework, stating, *"Corporate Governance and Business Ethics Committee [oversees] the Company's overall ethical culture, political contributions, lobbying expenses and overall political strategy, as well as the Company's Environmental, Social, and Governance strategy that includes environmental risk (which includes climate risk), sustainability and corporate social responsibility to minimize reputational risk and focus on future sustainability."*
- Sun Life uses their annual report[11] to note climate change as a risk factor and, in discussion of the risk, lists out disclosures in line with the TCFD framework. The report specifically names 'TCFD Disclosures' in the Risk Categories section with a subsection for each of the four disclosure areas and provides disclosures for all aspects of the TCFD framework.

3.2 NAIC CLIMATE RISK DISCLOSURE SURVEY

The NAIC adopted the Insurer Climate Risk Disclosure Survey in 2010 as a reporting mechanism that would provide regulators with a window into how insurers assess and manage climate change. As of 2021, all insurers who write over $100M of premium in New York, California, Washington, Connecticut, Minnesota, or New Mexico, representing roughly 70% of the U.S. insurance market12, are required to either submit a TCFD report or fill out this survey. There are eight questions in the survey, and results are publicly available, meaning this is an avenue to disclose climate-related strategies. The questions asked include topics relating to climate such as risk identification, mitigation, risk management, investment strategy, and policyholder engagement13.

3.2.1 PROS

- The survey asks questions on climate-related metrics that are unique to insurers, such as question six, which asks what steps are taken to encourage policyholders to reduce loss caused by climate-induced events. This allows for insurance-specific climate-related disclosures.
- Because the survey is mandatory for many insurers that sell business within the aforementioned U.S. states, this may provide incentives within some organizations to disclose climate risks and may encourage management buy-in that would not otherwise exist without a mandate.
- The survey questions align with pieces of the TCFD framework, such as the process for identifying climate-related risks and the actions the company is taking to manage them.

---

[9] The Progressive Corporation. Form 10-K 2020. *Progressive: Investor Relations,* Mar. 1, 2021, https://d18rn0p25nwr6d.cloudfront.net/CIK-0000080661/29165581-3e6b-452d-b9d6-1edf0e65159a.pdf (accessed Dec. 2021).
[10] Prudential Financial, Inc. 2020 Annual Report. *Prudential: Investor Relations,* Mar. 25 2021, https://s22.q4cdn.com/600663696/files/doc_financials/2020/ar/508_2020-Prudential-Annual-Report.pdf (accessed Dec. 2021).
[11] Sun Life Financial Inc. 2020 Annual Report. *Sun Life: Investors,* Jan, 2021, https://www.sunlife.com/content/dam/sunlife/regional/global-marketing/documents/com/annual-report-2020-e.pdf (accesses Dec. 2021).
[12] NAIC | Center for Insurance Policy and Research. Assessment of and Insights from NAIC Climate Risk Disclosure Data. *NAIC,* Nov, 23, 2020, https://content.naic.org/sites/default/files/cipr_insights_climate_risk_data_disclosure.pdf (accessed Dec. 2021).
[13] California Department of Insurance. Climate Risk Disclosure Survey Guidance Reporting Year 2020. *California Department of Insurance,* 2020, http://www.insurance.ca.gov/0250-insurers/0300-insurers/0100-applications/ClimateSurvey/upload/QUESTIONS-AND-GUIDELINES-CLIMATE-RISK-SURVEY-REPORTING-YEAR-2020.pdf (accessed Dec. 2021).

3.2.2 CONS

- The survey responses are generally less publicized than other reports, which can make responses less likely to be seen by investors and other stakeholders.
- Some parts of the TCFD framework, such as governance structure within the Board or metrics and targets used within the organization, are not explicitly covered by the survey, and may be left out from the survey response because of this.
- Responses are text only and do not allow for graphics, which can make material more difficult to absorb, particularly for scenario analysis results.

3.2.3 EXAMPLES

The following examples show responses of insurers who responded to one or all of NAIC survey questions with 'Yes' and use this as a way of disclosing in line with the TCFD framework. Responses to questions are found at the California Department of Insurance website[14].

- Humana Insurance Company describes a GHG emissions target they have set, in line with *Metrics and Targets c)* of the TCFD framework in question one of the surveys saying, *"We have committed that by the end of 2022, Humana will achieve a 2.1% YOY decrease (cumulative 10.5%) in greenhouse gas emissions from 2017 baseline emissions across our portfolio of owned and leased properties under direct Humana control."*[15]
- Genworth uses question four of the NAIC survey to describe the impact of climate-related risks on the organization's business, in line with *Strategy b)* of the TCFD framework noting, *"…increased frequency or severity of catastrophic weather or other natural events possibly related to climate change could increase the number of life and mortgage insurance policy claims Genworth receives, which could impact both its financial performance and business operations."*[16]

3.3 SUSTAINABILITY/ESG REPORTS

Sustainability reports may take on many different names (ESG reports, social responsibility reports, corporate social responsibility reports, etc.) but often summarize the efforts undertaken by the business focusing on environmental, social, and governance issues. The reports typically highlight activities that demonstrate corporate responsibility and can have a varying range of qualitative and quantitative information that communicate to stakeholders a company's performance against ESG metrics.

In the research of the 2021 TCFD status report, the Task Force reviewed reports of 1,651 large companies in multiple sectors for three years – 2018, 2019, and 2020. The Task Force found that even though there are a multitude of ways to provide the information that TCFD seeks to be disclosed, disclosures were primarily made in sustainability reports. On average, information aligned with the recommended disclosures was over four times more likely to be disclosed in sustainability reports than in financial filings or annual reports.

---

[14] California Department of Insurance. NAIC Climate Risk Disclosure Survey Results. *California Department of Insurance,* 2020, https://interactive.web.insurance.ca.gov/apex_extprd/f?p=201:1:::::: (accessed Dec. 2021).
[15] California Department of Insurance. Humana Insurance Company Survey Details. *California Department of Insurance,* 2020, https://interactive.web.insurance.ca.gov/apex_extprd/f?p=201:3:::NO:RP:P3_NAIC_YEAR:2020%20%2073288&cs=170BC4949B4B65EF73568D0D7EE09C600 (accessed Dec. 2021).
[16] California Department of Insurance. Genworth Survey Details. *California Department of Insurance,* 2020, https://interactive.web.insurance.ca.gov/apex_extprd/f?p=201:3:::NO:RP:P3_NAIC_YEAR:2020%20%2070025&cs=14738C36FCEC0C3C6C36B1CF27445A936 (accessed Dec. 2021).

3.3.1 PROS

- Sustainability reports do not have a standard form and are able to be customized to include the components of climate-related disclosures, including TCFD disclosure areas, that align with the company.
- Sustainability reports are typically highlighted in a key place on the company website and are very visible to investors and other stakeholders.
- This is currently the most common way companies are disclosing information related to climate-related risks and opportunities, so this approach is more likely to be aligned with peers.

3.3.2 CONS

- Sustainability reports contain a wide array of information, which can make it more difficult for readers to distill which aspects are related to TCFD disclosures if not specifically labeled.
- There is no standard requirement for content included in ESG reports, and reports from different companies may contain varying degrees of information and substance, particularly in regard to TCFD disclosures. This difference may cause a rating agency, investor, or other key stakeholder to undervalue a report, and makes comparability across different companies more difficult.
- These reports are not audited, which may lead to greenwashing rather than disclosing appropriate climate risks and opportunities.

3.3.3 EXAMPLES

There is often more than one type of climate disclosure within a sustainability report. The following examples show how three reports align to three different areas of the TCFD framework. Discussion of one disclosure example does not imply that other disclosures were not present within the reports.

- Intact produces a Social Impact Report, which describes the Risk Management Committee of the Board, who oversees *"The assessment and monitoring of the principal risks affecting our business, including ESG-related risks".*[17] This aligns to *Governance a)* of the TCFD framework.
- Allstate outlines their process of managing climate risks in public disclosures, including within their sustainability report, stating, *"We manage climate risks within our integrated Enterprise Risk and Return Management (ERRM) Program, which applies risk-return principles, modeling and analytics, governance, and transparent management dialogue to understand the company's highest-priority risks"*[18], aligning with *Risk Management b)* of the TCFD framework.
- Aflac discusses climate-related opportunities that the company has taken within their Corporate Social Responsibility report, stating *"In addition, we installed 500 solar panels on one of our Columbus buildings, and in the U.S., 86% of our eligible space has earned the Environmental Protection Agency's Energy Star Rating."*[19] This is in line with *Strategy a)* of the TCFD framework.

---

[17] Intact Financial Corporation Social Impact Report 2020. *Intact: In the* Community, 2020, https://s1.q4cdn.com/321139868/files/doc_downloads/2021/03/IFC-2020-Social-Impact-Report_EN.pdf (accessed Dec. 2021).
[18] Allstate sustainability report. *Allstate Sustainability,* 2020, https://www.allstatesustainability.com/content/documents/2020_Allstate_Sustainability_Report.pdf?v2021-07-28 (accessed Dec. 2021).
[19] Aflac ESG Report. *Aflac Incorporated,* 2020, https://esg.aflac.com/governance-social-environment?filters=environment#energy-management (accessed Feb. 2022).

3.4 CDP RESPONSE

CDP (formally known as Carbon Disclosure Project) is a not-for-profit charity that runs a disclosures system for environmental impacts. CDP started in 2000 to create transparency around the environmental impact of organizations across all sectors. CDP takes the information that is given through its standardized questionnaire and scores companies using its stated scoring methodology.[20] This score then becomes publicly available to use as a metric of environmental leadership. The sections of CDP include Governance, Risk and opportunities, Business strategy, Targets and performance, Emissions, Energy, Additional metrics, Verification, Carbon pricing, Engagement, and Signoff, and each question within each section is scored according to CDP scoring methodology. Scores of CDP responses have become a way in which investors and other stakeholders compare the climate-related disclosures of different companies.

3.4.1 PROS

- CDP provides a clear framework for producing climate disclosures, and in 2018 the questionnaire was redesigned to align with TCFD recommendations. In 2021, the questionnaire now contains over 25 TCFD-aligned questions.
- CDP is a well-recognized organization and disclosing through this platform provides credibility and recognition.
- While CDP scores don't capture all the nuances of a standalone TCFD report, they provide a simple, easily comparable metric of climate disclosure progress amongst different companies for investors.

3.4.2 CONS

- CDP does not directly align with the TCFD framework, and it may not always be clear to a reader if all aspects of the TCFD framework are covered in the CDP response.
- CDP responses are not able to be customized in a way that highlights key performance areas like a free flowing TCFD report would allow, and key points are more likely to be missed by a reader because of this.
- Responses are text only and do not allow for graphics, which can make material more difficult to absorb, particularly for scenario analysis results.

3.4.3 EXAMPLES

CDP responses align to the TCFD framework in more ways than one. The below responses are examples of this alignment in three different areas within three different insurance companies.

- Lincoln Financial Group responds to CDP and discloses their management's role in assessing climate-related risks and opportunities, in line with *Governance b)* of the TCFD framework. They state, *"The Chief Sustainability Officer (CSO) reports to the Executive Vice President and Chief Human Resources Officer who reports directly to the CEO. The CSO oversee[s] enterprise-wide integration of sustainability practices along with climate change risk and opportunity assessment."*[21]
- Great-West Lifeco discloses details of their quantitative scenario analysis in their CDP response, in line with *Strategy c)* of the TCFD framework. They use three climate scenarios: under two degrees with an orderly transition, under two degrees with a disorderly transition, and over four degrees. They describe their process and the results within their CDP response, indicating, *"The scenario analysis reinforced our existing business*

---

[20] CDP Climate Change 2021 Scoring Methodology. *CDP,* 2021, https://guidance.cdp.net/en/guidance?cid=18&ctype=theme&idtype=ThemeID&incchild=1&microsite=0&otype=ScoringMethodology&tags=TAG-605%2CTAG-646 (accessed Dec 2021).

[21] Lincoln National Corporation – Climate Change 2021. *Lincoln Financial Group: Corporate Responsibility,* 2021, https://www.lfg.com/wcs-static/pdf/CDP_Climate_Change_Report.pdf (accessed 2021).

objectives and strategies to limit exposures in vulnerable mortgage/property investments and continue opportunities to invest in clean energy growth and ESG related strategies and clean energy markets."[22]

3.5 TCFD INDEX

A TCFD index is an alternative to a full report that directs readers to other disclosures the company has made, linking them directly to the four disclosure areas of the TCFD framework. The index is generally a table that points to other disclosures including, but not limited to, a CDP response, annual report, or ESG/Sustainability report and is included as either a standalone disclosure or within the ESG/Sustainability report.

3.5.1 PROS

- A TCFD index clearly directs a reader to where disclosures that correspond to the TCFD framework are located, which is less onerous to a company than producing a full, separate disclosure.
- By clearly listing the areas of the TCFD framework, it is a clear statement that the company is aligning to TCFD recommendations.

3.5.2 CONS

- While a TCFD index allows clarity of what pieces of other disclosures correspond to what disclosure area, a full standalone report which places robust disclosures in one place better highlights the importance of the topic.

3.5.3 EXAMPLES

- Principal Financial Group produced a one-page TCFD index that maps the response of CDP questions to the disclosure areas of TCFD.[23] This report is separate from their Corporate Social Responsibility Report and can instead be found in the 'ESG data' section of their website.
- Cigna has a TCFD index as a part of their Corporate Responsibility Report. In the index, they take less of a table format and more of an essay approach that lists other references but also brings in pieces of the response from the reference.[24] For example, they list out their climate-related risks within the strategy piece that are taken from their 2020 CDP response.

3.6 STANDALONE TCFD REPORT

Standalone TCFD reports are comprehensive disclosures that align directly with the TCFD framework. Reports can take varying forms and be a variety of lengths, but all reports are separate disclosures that focus exclusively on the disclosure areas of the TCFD framework.

3.6.1 PROS

- Standalone TCFD reports often indicate that a company is mature in their climate disclosure strategy as they can be designed to be robust reports that demonstrate transparency and progress against the four disclosure areas.
- A standalone TCFD report showcases all information in one place to investors, rating agencies, and other stakeholders who are looking for disclosure against the TCFD framework.

---

[22] Great-West Lifeco Inc. CDP Climate Change Questionnaire 2021. *Great-West LifeCo Inc.: Corporate social responsibility,* 2021, https://www.greatwestlifeco.com/content/dam/gwlco/documents/reports/2021/great-west-lifeco-cdp-climate-change-questionnaire-2021.pdf (accessed Dec. 2021).

[23] Principal 2020 TCFD Index. *Principal: Sustainability,* 2020, https://secure02.principal.com/publicvsupply/GetFile?fm=WW1059&ty=VOP&EXT=.VOP (accessed Dec. 2021).

[24] TCFD Index. *Cigna: Corporate Responsibility,* 2020, https://www.cigna.com/about-us/corporate-responsibility/report/tcfd-index/ (accessed Dec. 2021).

- Standalone TCFD reports give a company flexibility in formatting and design to best fit the needs of the company, while still containing all information necessary to adequately disclose against the TCFD framework.

3.6.2 CONS

- Producing a standalone TCFD report requires time and resources, which may not be available depending on the size and maturity of the organization.
- Some companies are concerned about producing multiple reports with somewhat redundant information, which they feel may confuse external stakeholders more than it helps.

3.6.3 EXAMPLES

- Travelers produced a standalone TCFD report[25] for 2020. The report is 21 pages in length and has individual sections for each disclosure area. The report highlights graphics showing the governance structure in regard to climate, lists multiple risks and opportunities in line with the time horizons that are defined by the company, and details the metrics used to measure and manage climate risk. It also highlights the results of catastrophe modeling that has been incorporated into Travelers' underwriting, which may have been difficult to display outside of this standalone report.
- Centene Corporation has a 28-page standalone TCFD report[26], which is also broken into sections of the four disclosure areas. This report includes pictures, graphics, and text call-out boxes to aid readers in understanding their disclosure. The report also has many tables to help illustrate the clear alignment with the TCFD framework, showing risks in each TCFD risk area and the processes in place to manage them.

3.7 CONCLUSION OF APPROACHES TAKEN TO SATISFY TCFD

While there are pros and cons of each type of report discussed, developing climate-disclosures in any form is a way to demonstrate progress on climate-related activities to investors and other stakeholders. Best practice is to disclose a full standalone TCFD report and confirm the risk factors in the annual report align with the TCFD report (where material). Leading companies generally also respond to NAIC surveys, CDP, and produce Sustainability/ESG reports to disclose their ESG risks outside of climate. As climate disclosures continue to evolve, leading practices may change, especially as regulation begins to materialize. Companies should remain vigilant in their reporting and disclosure efforts to enable compliance with regulation, top scores from ratings agencies, and satisfied investors.

---

[25] Travelers Task Force on Climate-related Financial Disclosures Report 2020. *Travelers Sustainability,* 2020, https://sustainability.travelers.com/downloads/Travelers_TCFDReport2020.pdfv (accessed Dec. 2021).
[26] Task Force on Climate-related Financial Disclosures (TCFD) Report. *Centene Corporation: Corporate Sustainability,* 2021, https://www.centene.com/content/dam/centenedotcom/documents/CNC_TCFDReporting_082021_508.pdf (accessed Dec. 2021).

Section 4: How Insurers Are Using TCFD

Though there are many ways to disclose climate-related risks and opportunities through the TCFD framework, the way TCFD is used within individual organizations is unique and will vary based on the needs of the business. To understand the way insurers are currently using the TCFD framework within their organizations, four insurers across Life and P&C in the U.S. and Canada that are responding to TCFD were interviewed. These insurers responded to TCFD in different ways – two out of four currently integrate a TCFD section within their Sustainability/ESG report, one has a standalone TCFD report, and one makes all disclosures in their integrated annual report. The interviews conducted focused on how TCFD is used within various areas of the business, the way TCFD has influenced decision making, and the challenges of reporting in line with TCFD.

Business Areas Involved

All four insurers engage multiple areas of their business when writing their TCFD disclosures, but ultimate responsibility varied amongst the U.S. and Canadian insurers. For the two U.S. insurers, the Sustainability function held ultimate responsibility, while for the two Canadian insurers, the Finance function held responsibility (but the Sustainability teams had significant involvement). Other areas of the business involved across the four insurers included Legal, Risk Management, Actuarial, Investments, Real Estate, and Research and Development. Within these business areas, the organizations use the TCFD framework in varying ways. One insurer uses the framework to initiate conversations amongst the company and come to a consensus on their views on climate change, while another insurer uses the framework to think about immediate and long-term climate-related risks. One insurer interviewed expressed support for the framework as disclosure guidelines but stated TCFD is not used to guide strategy or other business decisions.

Peer Comparisons

The insurers interviewed were consistent in the view that TCFD helps to provide comparisons amongst peers, although the level of comparison used varied. One company stated that benchmarking amongst peers was generally done through sustainability reports rather than standalone TCFD reports, but others use TCFD reports as a key metric to benchmark against. One company also uses peer review in their climate-related stress-testing that is done as a piece of their scenario analysis and is a member of the CFO network for sustainability where they share current practices and learn what others are doing on their climate disclosures. Overall, all insurers expressed that it was useful to compare against peers in their climate disclosure to either help guide the direction of new reports or to help make the case to their management of why they should be disclosing certain metrics. One insurer also compared TCFD reports of other companies in their role as an institutional investor.

Feedback Received

Another consistency across the four insurers was the overall positive feedback they had received on their TCFD disclosures. One company noted that their board was very pleased with the report and that reinsurers had viewed the report positively, and another mentioned positive feedback from investors. Two companies stated that since the release of their reports they have had peers reach out to learn more about their process of drafting the report and performing scenario analysis. For most companies, the feedback they have received has not provoked change of their climate disclosures, but one company has gotten pressure to enhance their scenario analyses and Scope 3 emissions disclosures, which has helped to drive progress in later versions of their reports.

Challenges Faced

Each insurer interviewed faces its own set of unique challenges when reporting against the TCFD framework. One organization expressed challenges in scenario analysis given the little guidance that is provided by TCFD or other organizations. They have been performing scenario analysis by incorporating this into their existing stress testing framework and adding new parameters specific to climate risk assuming higher level of catastrophe budgets, increased severe weather, and higher reinsurance costs. They have also begun to incorporate transition risks into their asset portfolio and will continue to adjust their approach as further guidance and best practices emerge. A second insurer found scenario analysis to be challenging as well, noting that defining narrow financial indicators is difficult given the wide ranges of potential impacts and lack of financial materiality.

Another insurer faced challenges in reporting against the TCFD framework due to the complexity of its business. As a large, multinational insurer, there were areas that did not easily fit within the framework. Further, because the business is very large, finding resources and content within the company was difficult, especially for their first TCFD report. This also caused data issues, with many different formats and infrastructures causing challenges in aggregation for a company-wide report. Further, there were competing forces between the desire to be more transparent and the company's comfort level of disclosing sensitive information.

Three of the four insurers found Metrics and Targets to be the most difficult area of TCFD to disclose against, particularly if the organization has not yet set any climate-related targets. The process of setting a goal involves needing to baseline emissions, make a plan to reach the goal, and get the goal approved within the organization. However, once this process is established, Metrics and Targets becomes a much more manageable disclosure area. Another difficult area of disclosure is Strategy, especially scenario analysis, due to reasons mentioned above.

Support Needed

When asked what kind of support would help to make better use of the framework, insurers had varying responses. One insurer opined that better demonstration on how smaller companies can respond to TCFD in a simplistic way would be the biggest help, while another said that greater alignment from regulators would be the most helpful. One insurer did not think more support was needed but noted that the momentum of TCFD and messaging of support coming from key players such as the New York Department of Financial Services (NYDFS) and Blackrock have been very helpful.

Conclusion

Each insurer is unique in the way they fit TCFD to their business, but all interviewees expressed support for the TCFD framework, stating that it is a helpful framework for climate disclosures. The framework has helped build support for climate disclosures within individual organizations and in the insurance industry as a whole. The insurers were hopeful that progress within their organizations in regard to their climate strategies and level of disclosure would continue to improve as support for TCFD from investors and regulators continues to grow.

Section 5: Review of Current Public Disclosures

In order to assess where the insurance market within the U.S. and Canada currently sit within their maturity of climate disclosures, a review of 50 insurers' publicly available climate disclosures was completed. The insurers were chosen randomly with the intention of providing a range of sizes and lines of business. All insurers are domiciled within the U.S. or Canada. Research was done on their public climate disclosures of each company including CDP responses, ESG reports, and TCFD reports, where available. The dashboard (link below) visualizes the results of this research. It can be filtered to show insights on the type of insurer, location of insurer, and size of insurer. The second page of the dashboard can also be used to drill down into one specific insurer.

It is important to note that the results displayed on the dashboard represent the availability of disclosures and climate risks identified within a sample of insurers. The quality of disclosures was not assessed, and the researchers make no claims about quality, accuracy, or completeness of the disclosures. Further, a company that does not have climate change disclosures does not necessarily mean the company is not taking action internally to measure risk or mitigate climate change.

DASHBOARD: https://tableau.soa.org/t/soa-public/views/SOATCFD/ReadMe

This research supports the finding from the documents review within section one of this report, showing that larger organizations were more likely to report in line with TCFD. This also supports the assumptions that while many insurers do have climate-related disclosures, many do not, with 19 of 50 insurers reviewed having no climate reports. This research also indicates that Life companies are slightly less likely to have climate disclosures compared to P&C (15 out of 26 compared to 16 out of 27), and Canadian insurers slightly less likely than the U.S. insurers (12 out of 20 compared to 19 out of 30).

NOTE: *Research has been done on companies using publicly available data in November 2021. While every effort was made to review all data available, it is possible information was missed, and the SOA Research Institute and the authors of the report are not responsible for information that may be inaccurate or incomplete.*

Section 6: Conclusion

Overall, it is clear that climate disclosures are becoming more prevalent amongst insurers, with 34% of insurers now aligned to the TCFD framework across all recommendations, and over 50% disclosing climate-related risks and opportunities. The TCFD status report revealed the largest increase in disclosures was from 2019 to 2020, and ClimateWise found the same results. This is likely due to increased concern from investors and regulators, as well as a desire for insurers to understand the way their business may be impacted due to climate change in the future. While there are challenges associated with TCFD, particularly in performing scenario analysis (as shown by only 18% of insurers disclosing in this area and heard from insurers interviewed for this report), there is ongoing momentum encouraging disclosure of climate risks and opportunities, and disclosures are progressing despite these challenges faced.

While practices around climate-related business processes and disclosure continue to shift as more guidance and regulation is released, the push for more integration of climate considerations into day-to-day business is becoming more common within governance, strategy, risk management, and metrics and targets. Insurers are establishing organized structures within their leadership framework related to climate-related risks and opportunities, performing scenario analysis within their investment portfolios, integrating climate risk assessment and management into their ERM programs, and setting ambitious goals in line with net zero targets as well as making plans to get there. These are a few examples of the ways leading insurers are aligned with the TCFD recommendations, but emerging trends are taking these examples even further. Leading and emerging trends are seen more within insurers from Europe and the UK, likely due to faster paced regulation in these geographies, however, U.S. and Canadian insurers can use these examples and emerging practices as a guide to move forward in their TCFD journeys and make progress on climate-related activities.

There are many ways to begin making climate disclosures, and many formats to consider when beginning the process. While standalone TCFD reports are best practices at this time, insurers should start in a place that makes the most sense for their business, whether that be including climate change as a risk factor in an annual report, responding to the NAIC climate survey, responding to CDP, or disclosing climate-related information in a sustainability report. Insurers who have gone through the process have received positive feedback from their Boards, investors, regulators, and peers, and note that the process has been useful to their businesses.

The benefits of independent validation of climate disclosures are clear, but so far this practice is less common. As climate disclosures continue to be relied upon by investors, and potentially mandated by regulators, such independent validation will take on even greater importance. Currently, many organizations receive validation for their GHG emissions, but the validation will need to extend beyond emissions in the future and be over the entirety of risks and opportunities being published.

While U.S. and Canadian insurers have room for improvement in considering and disclosing climate-related risks, opportunities, and processes, there has been progress over the past few years, and this progress is likely to continue. Climate change disclosures are an important step to help identify and manage risks and opportunities within the organization and to begin a process of embedding climate change within the decisions, strategy, and financial planning of the business. Insurers who ignore climate change will not only be left behind compared to peers but may also face an increased level of risk without adequate consideration and preparation.

Section 7: Appendix

Questions asked to insurers in interviews:

1. Who is responsible for putting together the TCFD disclosure within your organization? If business areas work together on the response, who holds the ultimate responsibility?
2. How do you use the TCFD framework within different business areas such as risk management, investments and underwriting?
3. Is the TCFD framework used to inform any business decisions, including resource allocation and strategic direction? If so, how?
4. Do you use the TCFD framework to spread awareness of climate-related issues throughout your organization? If so, how?
5. Have you used the TCFD framework to develop and/or refine the internal governance process to inform board/management on climate-related issues?
6. Have you used the TCFD framework to provide meaningful comparisons of strategy, business activities, risks, and performance with other organizations within your peer group?
7. Have you used the TCFD framework to estimate climate-related metrics (e.g., GHG emissions) and/or set climate-related (e.g., net-zero) targets and strategies?
8. Have you gotten feedback from stakeholders on your TCFD disclosures? If so, has this feedback motivated you to change anything in your TCFD disclosures, or enhance other disclosures?
9. Have you used the TCFD framework to promote or actively engage in public debate on climate-related issues and the need for action?
10. What are the biggest challenges/limitations for your organization to fully report and use the TCFD framework?
11. Which TCFD area (governance, risk management, strategy, or metrics and targets) is the most challenging to report on? Why?
12. What kind of support (from regulators or other institutions) may help your organization use the TCFD framework better?
13. What reference material or reports were most useful to your organization when crafting your TCFD disclosure?

Section 8: Acknowledgements

The researchers' deepest gratitude goes to those without whose efforts this project could not have come to fruition: the Project Oversight Group and others for their diligent work overseeing questionnaire development, analyzing and discussing respondent answers and reviewing and editing this report for accuracy and relevance; all insurers interviewed for their insights into how TCFD is being used at their organizations.

Project Oversight Group members

Marc Altschull

Eric Berg

Timothy Cheng

Bronwyn Claire

Sam Gutterman

Priya Rohatgi

Max Rudolph

At the Society of Actuaries

Rob Montgomery, ASA, MAAA, FLMI, Consultant – Research Project Manager

Dale Hall, FSA, MAAA, CERA, CFA – Managing Director of Research

Patrick Wiese, ASA – Lead Modeling Researcher

Participating Insurance Companies:

The Co-operators

Manulife

Unum

About The Society of Actuaries Research Institute

Serving as the research arm of the Society of Actuaries (SOA), the SOA Research Institute provides objective, data-driven research bringing together tried and true practices and future-focused approaches to address societal challenges and your business needs. The Institute provides trusted knowledge, extensive experience, and new technologies to help effectively identify, predict, and manage risks.

Representing the thousands of actuaries who help conduct critical research, the SOA Research Institute provides clarity and solutions on risks and societal challenges. The Institute actuaries, academics, employers, the insurance industry, regulators, research partners, foundations and research institutions, sponsors, and non-governmental organizations, building an effective network which provides support, knowledge, and expertise regarding the management of risk to benefit the industry and the public.

Managed by experienced actuaries and research experts from a broad range of industries, the SOA Research Institute creates, funds, develops and distributes research to elevate actuaries as leaders in measuring and managing risk. These efforts include studies, essay collections, webcasts, research papers, survey reports, and original research on topics impacting society.

Harnessing its peer-reviewed research, leading-edge technologies, new data tools and innovative practices, the Institute seeks to understand the underlying causes of risk and the possible outcomes. The Institute develops objective research spanning a variety of topics with its strategic research programs: aging and retirement; actuarial innovation and technology; mortality and longevity; diversity, equity, and inclusion; health care cost trends; and catastrophe and climate risk. The Institute has a large volume of topical research available, including an expanding collection of international and market-specific research, experience studies, models, and timely research.

Society of Actuaries Research Institute
475 N. Martingale Road, Suite 600
Schaumburg, Illinois 60173
www.SOA.org