Canada Climate Law Initiative | L'Initiative canadienne de droit climatique

Climate Change and Pension Funds

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CCLI Commonwealth Climate and Law Initiative

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About the Canada Climate Law Initiative

- The Canada Climate Law Initiative is a national research initiative that works to clarify directors' duties and fiduciary obligations related to climate change.
- Our mission is to ensure Canadian directors and trustees understand their fiduciary obligations with respect to climate change, and have access to resources to help them govern with confidence in the area of climate-related financial risks and opportunities.
- We offer free confidential board presentations and we maintain an online Knowledge Hub for Canadian directors and trustees.

Disclaimer: CCLI makes efforts to be as accurate as possible in sharing the information on these slides; however, for complete accuracy it is important to refer to the original sources. This presentation does not represent any legal, accounting or investment advice, please contact your lawyer, accountant or investment manager for any legal or other professional advice.

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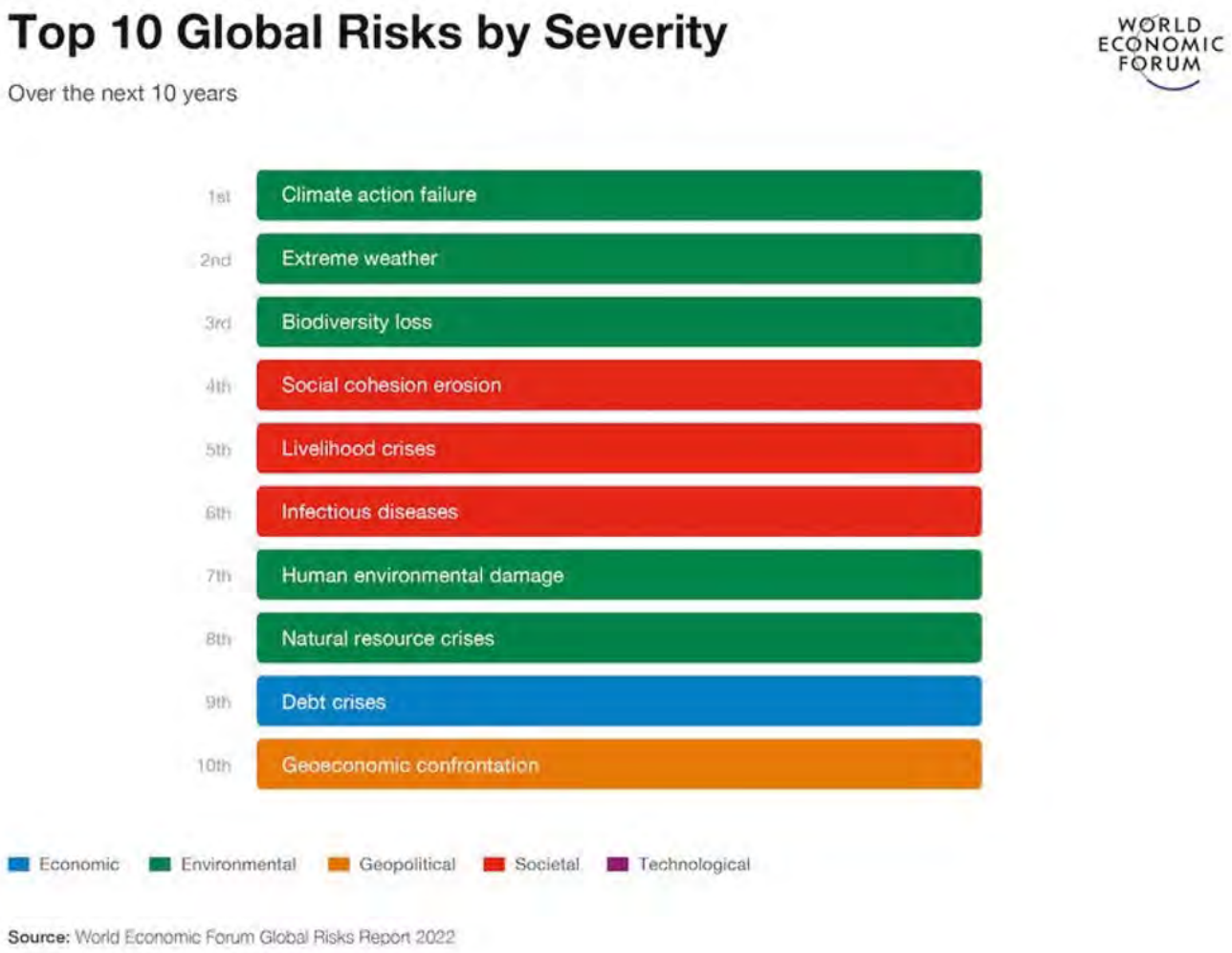
What are the likely trends related to climate risk?

Some basic facts

- Climate change is a real thing (denial from carbon industries and certain governments)
- Caused by GHG emissions arising from human consumption
- A whole-economy problem (not just energy, oil and gas problem)
- Primary group generating climate change science and policy is the IPCC
- Their work was used to create what is known as the “Paris accord”, a series of policy targets to be adopted globally, the objective of which is to reduce GHG emissions and limit global rise in average temperature to 1.5 degrees
- Widely recognized we will not meet that objective (on track for 4 degrees)
- The planet will be fine: the effect of working people and communities will be unprecedented
- Question for unions and workers: where should we put our efforts?
- Next few slides will show how this is normally described to trustees and pension fund stakeholders.

The ‘top three’ perceived severe risks over the next 10 years are all climate related



Severe weather and flood losses are on the rise

In Canada, payouts have more than doubled every 5-10 years since 1980s

Climate change is a green swan

The next financial crisis?

The Bank of Canada has joined the Network for Greening the Financial System, and recognizes that climate change presents systemic financial risks and that financial institutions have a key role to play in facilitating the goals of the Paris Agreement.

It’s not climate change, it’s everything change

Risk of 4-6°C increase is unacceptably high, given exponential impacts

- **Even <2°C, impacts are significant, esp. flood / drought**
- **>3°C warming is likely, passing multiple tipping points**
- **>5°C warming is potentially existential**
- **Risk of 5-6°C is estimated at >10%. Unacceptably high!**

Warming by 2100		<2 °C	
Physical impacts		1.5 °C	2 °C
Sea-Level Rise (cm)		0.3-0.6 m	0.4-0.8 m
Coastal assets to defend ($tn)		$10.2tn	$11.7tn
Chance of ice-free Arctic summer		1 in 30	1 in 6
Tropical cyclones:	Fewer (#cat 1-5)	-1%	-6%
	Stronger (# cat 4-5)	+24%*	+16%
	Wetter (total rain)	+6%	+12%
Frequency of extreme rainfall		+17%	+36%
Increase in wildfire extent		x1.4	x1.6
People facing extreme heatwaves		x22	x27
Land area hospitable to malaria		+12%	+18%

Environmental	Potential Impacts	Human
Indicative findings from selected research	6°C	End of civilisation? www.cser.ac.uk
Mass extinction of >95% of species Global food productivity collapses Majority of agricultural land lost	5°	General social breakdown: survival Large areas are uninhabitable
Coasts eroded, flooded, aquifers saline Widespread drought US, Africa, Med, India Biosphere switches to net emitter of CO_2	4°	Conflict / war: resource competition Many deaths from weather disasters
Loss of majority of Amazon rainforest c.20% loss of crop productivity	3°	Global GDP materially reduced Repeated famines, mass migration
Ocean acid kills off base of marine food-webs Committed to full ice-cap melt (sea-level eventually up +100ft/31m @2m/century)	2°	Infectious diseases spread Widespread hunger and water stress
Glacier loss imperils irrigation (e.g. Pakistan) Worse flood/wind/wildfire/droughts/heat Average 60% drop in animals & insects	1°	Rising tensions over resources Impacts already felt by those in poverty
	0°	

Chapter Zero

GARP
GRI | Risk Institute

Credit: GARP and Chapter Zero

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5 reasons to put climate governance on the board agenda

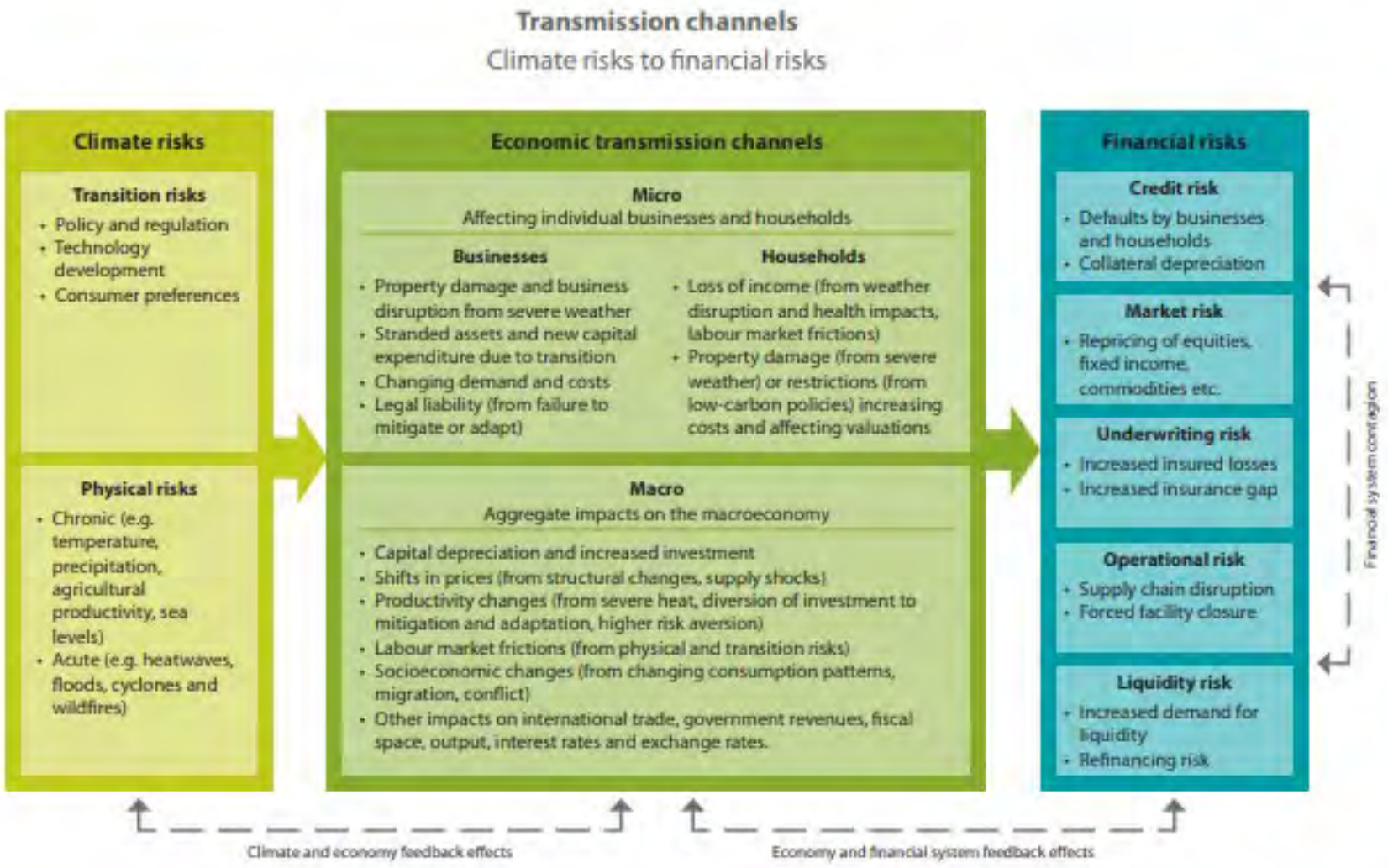
The standard theory and underlying assumption

1. Effects of climate change will affect value of assets and securities in a pension portfolio. Trustees should be trying to measure and predict these effects and take steps with your portfolio to address these risks.

2. Assets that contribute to climate change will be “stranded” or worth less and less if anything. The primary way in which these assets will becomes worth less is by governments putting a price on carbon, which will go up steadily for foreseeable future, making an asset with a price based on carbon less usable (too costly to use). You should be “pricing in” the rising price of carbon on your assets.

3. One of the underlying premises is that putting a price on carbon (through legislation) will eventually cause investors and all people to make decisions to avoid using carbon, because it is too expensive. The hope (theory) is that collectively we will move from carbon to non-carbon soon enough and in sufficient quantities to meet the Paris targets. There are good reasons to believe this will not be the case, which limits the case for market-based climate activism. Alternative ways of addressing climate change are necessary to meet Paris targets.

1. Risk management

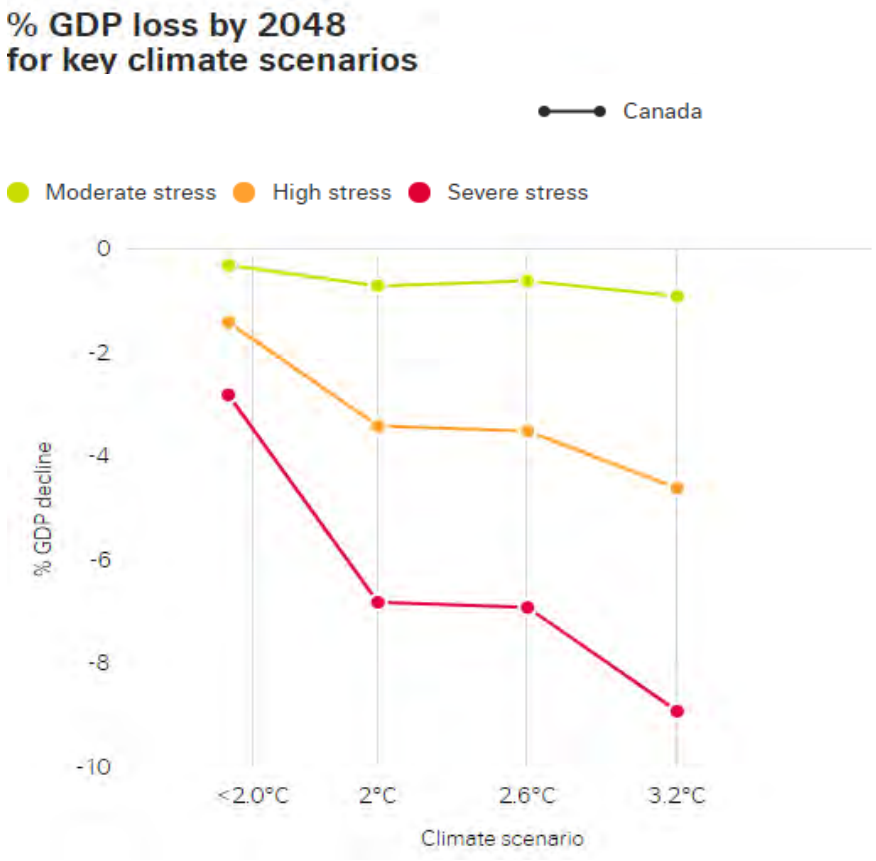


Source: NGFS, page 9, https://www.ngfs.net/sites/default/files/medias/documents/820184_ngfs_scenarios_final_version_v6.pdf

Physical and transition risks are material for most industries

Physical risks can be acute (e.g. increased severity of extreme weather events) or chronic (e.g. related to longer term shifts in climate patterns). Example: withdrawal of insurance for property transactions during wildfire season.

Transition risks relate to policy, legal, technology, market, or reputational risk. Example: action to mitigate physical risk end up changing cost structure for many industries.



Source: SwissRe Institute Climate Economics Index

2. Investment strategy

For corporates:
Cost of capital, activism, and trade

Lenders are committing to net-zero emissions in lending by 2050; Vancity is a signatory to the Net-Zero Banking Alliance and has set a deadline of 2040.

Investors are asking for data on climate risk, and seeking out sustainable investment options (e.g. Blackrock, CDPQ).

Green bond issuance has passed the $1 trillion mark.

Trade: Canada and U.S. are considering border carbon adjustments to preserve competitiveness. EDC strengthened its climate lens.

Shareholder activism, including proposals on environmental matters and 'Say on Climate' votes, have increased (e.g. Exxon, Chevron).

For investors:
Evaluating exposure and collective action

ESG factors associated with improved long-term, risk-adjusted returns.

Green taxonomies shaping the market (e.g. EU Taxonomy, CFA Standards).

Investing for sustainability impact approaches, where considered effective in achieving investors financial goals, investor could be legally required or permitted to consider using them (Freshfields report).

Collective action: Pension funds and other institutional investors are committing to net-zero by 2050, and working collectively to ask for credible, consistent and comparable data on climate risks, impacts and actions (e.g. CA100+, Climate Engagement Canada).

2. Investment strategy

MORNINGSTAR®

How Does European Sustainable Funds' Performance Measure Up?

Exhibit 1 Sustainable Funds' Success Rates by Morningstar Category (%)

	Success Rate of Sustainable Funds			
Category	1-Year	3-Year	5-Year	10-Year
Global Large-Cap Blend Equity	75.1	73.7	76.9	67.3
Global Large-Cap Growth Equity	60.3	43.2	37.5	56.7
Global Emerging Markets Equity	41.3	60.0	58.8	50.0
US Large-Cap Blend Equity	76.4	71.4	76.9	81.3
Europe Large-Cap Blend Equity	71.1	75.0	67.2	55.1
Eurozone Large-Cap Equity	63.5	63.0	60.6	62.3
EUR Corporate Bond	58.0	58.5	62.2	33.3
All Categories	**65.6**	**65.6**	**64.4**	**58.8**

Source: Morningstar Direct. Morningstar Research. Data as of 31/12/2019.

- Average returns and success rates for sustainable funds across seven Morningstar Categories suggest that there is no performance trade-off associated with sustainable funds. In fact, a majority of sustainable funds have outperformed their traditional peers over multiple time horizons.
- Over the 10 years through 2019, nearly 50% of surviving sustainable funds across the categories considered have beaten their average surviving traditional counterpart.
- Sustainable funds held up better than their traditional counterparts during the COVID-19 sell-off, delivering superior returns in all but one category.

A note on ESG and climate

- There is a history to the ESG movement that is important to know to understand how ESG and climate will be brought to a trustee table.
  - See K. Skerrett et al, Contradictions of Pension Fund Capitalism
  - A basic question: is ESG a social movement/priority, or a marketing development by asset managers?
- Technically, climate matters are a sub-category of ESG, in the “E” field
- However, climate matters are distinct from the treatment of other ESG factors in that, there is just zero doubt that climate change is a material risk to all assets in all funds everywhere, and in fact, as previously suggested, is a public policy problem that is not solvable through market asset allocation decisions
- Some basic observations:
  - ESG is a highly contested set of proposals and concepts
  - Has proven to be very manipulable
  - ESG and climate each have become areas for a significant amount of misrepresentation and virtue signalling, e.g., “greenwashing”

3. Staying ahead of changing regulations

Courts recognize the significance of climate change

- Saskatchewan Court of Appeal and Court of Appeal for Ontario: “human-caused climate change poses an existential threat”.
- Alberta Court of Appeal: “The dangers of climate change are undoubted, as are the risks flowing from failure to meet the essential challenge.”

Canada is committed to net-zero emissions by 2050

- Supreme Court held that the *References re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11* is constitutionally valid legislation.
- Canada’s Net Zero Emissions Accountability Act establishes 5-year carbon budgets towards net-zero emissions by 2050.

Canadian securities regulators are clear

- Canadian Securities Administrators (CSA), Proposed National Instrument 51-107 Disclosure of Climate-related Matters, 2021: The CSA proposed climate-related disclosure requirements for corporate issuers aligned with TCFD recommendations.

Federal regulators acknowledge risk to Canadian economy

- Bank of Canada’s 2019 Financial System Review, reports climate change as a vulnerability to Canada’s economy and financial system.

4. Complying with changing disclosure requirements

2016

Ontario Pension Benefits Act Regulation 909
Pension plan statement of investment policies and procedures (SIPPs) must include how ESG factors are incorporated into the plan's investment policies and procedures.

(2010) U.S. SEC Guidance
Companies should consider how climate change impacts their operations and financial statements, including both direct and indirect impacts, such as impacts on suppliers and customers.

2017

2018

E.U. Directive on Non-Financial Reporting
Large corporations (>500 employees), banks and insurance companies of any size must disclose ESG information.

2019

Canadian Securities Administrators, Staff Notice 51-358 Reporting of Climate Change-related Risks
Companies must disclose material climate risks and how they are addressing them.

2020

Carol Hansell Opinion
Corporate directors are obliged to address climate risks.

2021

Canadian Securities Administrators, Proposed National Instrument 51-107 Disclosure of Climate-related Matters
Proposed requirements for climate-related disclosures by corporate issuers.

Randy Bauslaugh Opinion
Fiduciaries are responsible for failure to properly take climate change risks into account.

U.K. Mandatory Climate Disclosure
Pensions > £5B
Banks, building societies, insurance, premium listed companies.

E.U. Regulation 2019/2088
Financial market participants must disclose information on inclusion of ESG assessments in the investment and advisory processes.

2022

Canada Mandatory Disclosure
Crown corps > $1B.

U.K. Mandatory Climate Disclosure
Pensions > £1B
Banks, building societies, insurance, premium listed companies.

Japan Mandatory Climate Disclosure
Large companies, including companies listed on the Tokyo Stock Exchange.

Singapore Mandatory Climate Disclosure
All issuers included on the Singapore Exchange.

US SEC Mandatory Climate Disclosures
U.S. public companies

2023

(2023-2025) U.K. Mandatory Climate Disclosure
Other pensions, asset managers, and life insurers.

New Zealand Mandatory Climate Disclosure
Financial sector >$1B; all equity and debt issuers.

International Sustainability Standards Board (ISSB)
Implementation of a new global climate risk standard by 2023.

2024

Canada Mandatory Disclosure
Crown corps < $1B.

Swiss Mandatory Climate Disclosure
Financial actors, public companies >CHF40M.

Task Force on Climate-related Financial Disclosures (TCFD): A comprehensive framework

Core Elements of Recommended Climate-Related Financial Disclosures

Governance
The organization's governance around climate-related risks and opportunities

Strategy
The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

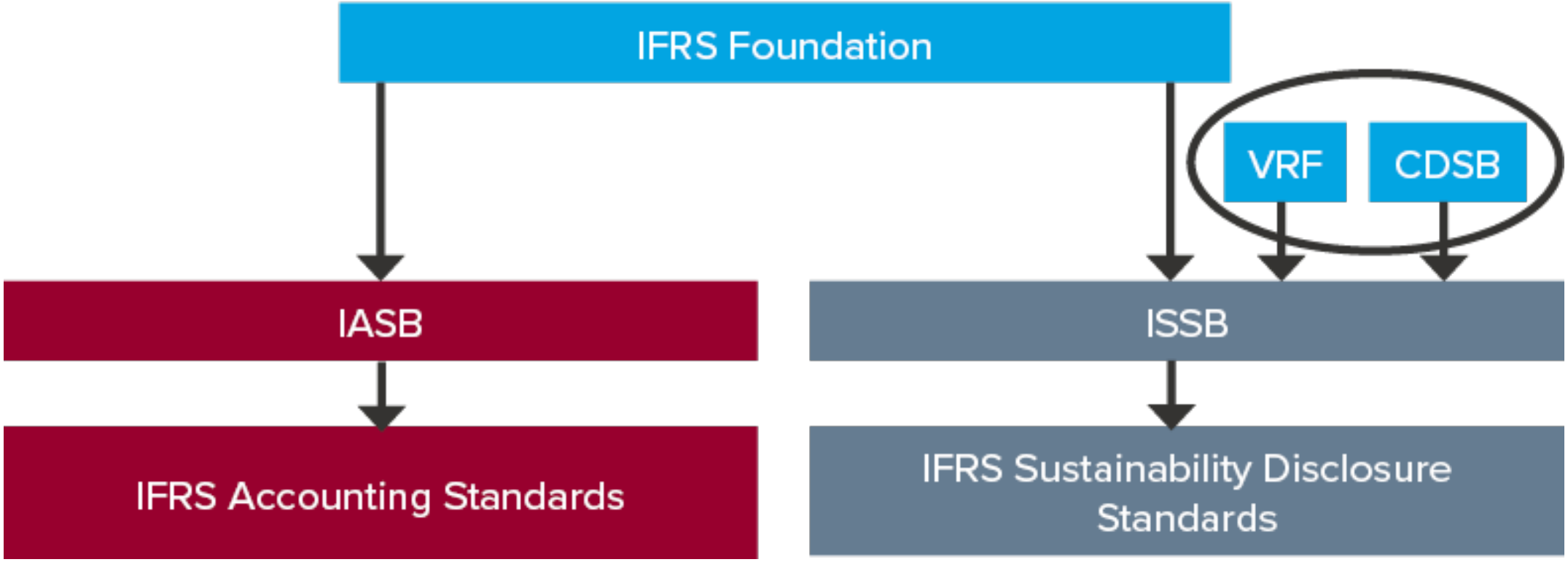
Risk Management
The processes used by the organization to identify, assess, and manage climate-related risks

Metrics and Targets
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Source: TCFD Final Report – Recommendations of the Taskforce on Climate-related Financial Disclosure

Sustainability standards have emerged, providing a basis for comparable and consistent reporting

Creation of ISSB and COP26 update - Structure



5. Legal duties

Duty of Loyalty

Fiduciaries must act in honestly and good faith in the best interests of their beneficiaries, impartially balance the conflicting interests of different beneficiaries, and have a duty not to act for the benefit of themselves or a third party (avoid conflicts of interest).

Duty of Prudence or Care

Fiduciaries must act with the care, diligence and skill in the administration and investment of the pension fund that a person of ordinary prudence would exercise in dealing with the property of another person.

Intergenerational implications

Pension plan fiduciaries must recognize and balance current and future intergenerational risk and return considerations over periods that potentially exceed human lifetimes.

Duty cannot be delegated

Pension trustees hold these obligations even if they delegate investment decisions and corporate engagement to asset managers.

Randy Bauslaugh Opinion

'No matter how big or how small, plan fiduciaries and their delegates are ultimately responsible for any failure to properly take climate change risks and opportunities into account. This responsibility could manifest itself in many different ways, and compensation for breach of fiduciary duty can be much more generous than under contract or tort law.

A fiduciary might face:

(a) removal;

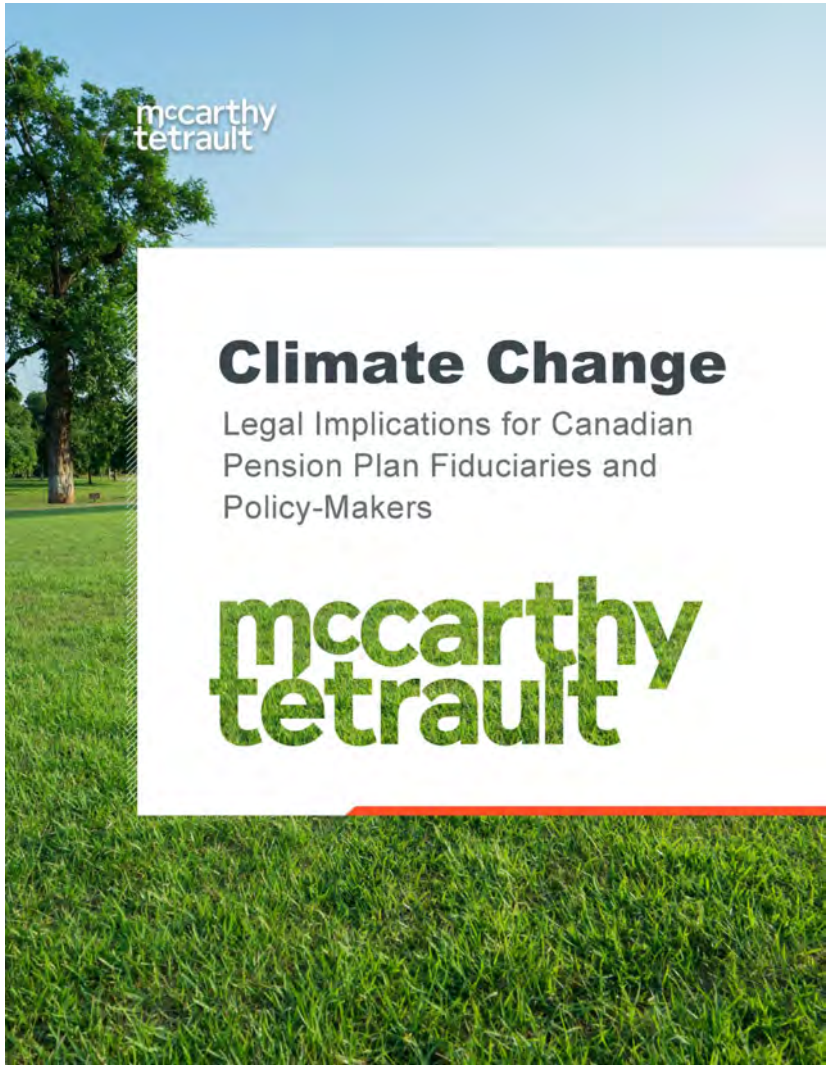
(b) court ordered disclosure of information relating to climate change financial risks

(c) fines and penalties under pension standards legislation; and

(d) personal financial responsibility for investment underperformance or loss resulting from failure to properly manage climate change risks and opportunities, including equitable compensation or exemplary damages.'

- Legal Implications for Canadian Pension Plan Fiduciaries and Policy-makers

Randy Bauslaugh, McCarthy Tetrault, June 2021



Current status of guidance

- 2022 – CAPSA to issue ESG guidance, expected to deal with climate risks
- January 2022, OSFI/BoC release scenario testing for sample of regulated entities
- 2021-2022 – Canadian securities regulators consulting on NI-51-107, standards for reporting climate change risks
- December, 2021, Financial Conduct Authority (prudential pension regulator) issues climate risk assessment policy statement (guidance)
  - Probably most advanced guidance in a very similar legal jurisdiction
- Bill S-243 – Climate Aligned Finance Act (March 24, 2022)

FCA Guidance

- Principles-based framework (akin to investment and governance pension regulation in Canada)
- Assumes materiality for most or all market actors - not a question
- Consistent references to government/state policy targets (net zero 2050 or better)
  - Timelines are only going to tighten, carbon prices are only going to rise
- Applies to all actors large and small (staged implementation)
  - Cf. litigation against carbon majors finding liability along full supply chain
- Rationales include strong price signals, market integrity (greenwashing) and disclosure/transparency, and standardization of measurement and disclosure
- Reporting at individual asset ***and*** portfolio level
- On-going and more detailed dialogue on sector-wide minimums

A note on regulatory guidance

- The entire premise of the legal duties and regulatory guidance just reviewed is to create “price signals”. The FCA guidance makes this most explicit, and acknowledges that sending price signals through carbon pricing and forcing measurement and disclosure is the objective.
- As previously noted, while these activities are desirable, they have two major drawbacks:
  - The degree of manipulability of “carbon compliance” activities is so great that a lot of resources are required to make this system work, and there is great risk of greenwashing, etc.
  - It leaves policy-making to achieve Paris targets within the financial sector system, actors, norms and culture. This will not be enough to meet Paris targets.
- Instead, it is widely recognized (I believe) that a very significant mobilization of public resources will be required to address climate change. Establishing the political conditions for that level of public investment is and should be the priority for all stakeholders. For pension funds, this should mean calls for public investment in climate change activities on a large scale.
- There are a number of stakeholders working toward this goal, including unions, environmental groups, and yes, even lawyers.

Climate litigation cases are increasing

Source: Norton Rose Fulbright, As of Feruary 2020, https://www.nortonrosefulbright.com/en/knowledge/publications/0c9b154a/climate-change-litigation-update

Successful litigation cases against corporates

Dutch court ordering Shell to reduce 45% of overall emission by 2030

The court recognized that Shell:

- ❑ has an “obligation of result” to reduce CO2 emissions resulting from the Shell group’s activities
- ❑ and a “best-efforts obligation” to reduce emissions generated by its business relations, including suppliers and end-users.

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What are the opportunities?

Pathways to net-zero and the urgency of climate challenges

Extreme weather affects 4 billion people causing $4T in losses

'Peak oil' but 1.1 billion lack access to electricity

7 billion tonnes of plastic waste

Infrastructure resilience $120 billion per year

Renewables and smart grid $10.2T to 2050

Circular economy $4.5T to 2030

Demand for solutions:
Clean Energy
Green Buildings
Green Mobility
Industrial processes
Forestry
Agriculture
Materials and waste

Sustainable infrastructure $625B to 2050

Sustainable agriculture $4.5T to 2030

3 million people move to cities every week

Half world's food wasted while 1 billion go hungry

Credit: International Financial Consulting Ltd / Juvarya Veltkamp, 2020

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Getting started: Questions to ask

Questions for the board

- ☑ Does the pension fund have a climate strategy? Does the board have effective oversight of the strategy? Is the strategy reviewed annually?
- ☐ Who is responsible and accountable for implementing the pension fund's climate strategy?
- ☐ Does the board have effective oversight of management? Is management undertaking careful and thorough evaluation of climate change risks and opportunities in making decisions to invest, divest, or hold?
- ☐ Has the board agreed on material metrics and targets to measure and disclose climate-related issues? Are metrics aligned with global standards? Are there clearly articulated standards and metrics to evaluate investment managers, green investment offerings, and green funds?
- ☐ Does the pension fund clearly disclose its climate strategy to beneficiaries? Is the board reviewing and approving the disclosure?
- ☐ Does the board have climate expertise and knowledge in its matrix of skills? If not, how is it acquiring/hiring the expertise? Which board members are taking the lead?
- ☐ Does the Board participate in or support pension sector engagement with government on climate policy?

Questions trustees should ask investee companies

- ☑ Does the company have a climate-proof business plan? Does it have a emissions reduction plan compatible with 45% reductions by 2030?
- ☐ Has the board assigned clear responsibility for implementing its climate strategy and is it effectively monitoring against targets?
- ☐ Has the company assessed where climate risk is material to its business, and does it integrate climate-related financial impacts into its financial reporting?
- ☐ Is the company effectively reporting its efforts to manage climate change to investors in line with the TCFD framework?
- ☐ Has the company identified strategic climate opportunities for the business over the short, medium and long term, and embedded them in its business plan?

Questions trustees should ask their asset managers

- ☑ Does the asset manager systematically integrate climate change factors into investment analysis and decisions?
- ☐ Who is responsible and accountable for implementing the asset manager's climate analysis within the investment process?
- ☐ Does the asset manager undertake climate-related engagement with investee companies, and how does it measure progress? Does the asset manager engage in proxy voting in line with the goal of managing climate risk?
- ☐ How does the asset manager's active ownership practices impact its investment decisions?
- ☐ Is the asset manager effectively reporting its efforts to manage climate change to the board, including integrating climate risk and return in its financial and investment reporting?
- ☐ Is there a clearly articulated written mandate between pension asset owners and asset managers that sets out stewardship expectations? Is it periodically evaluated?

Conclusion

Our understanding of climate change has evolved – from an ethical or environmental issue, to one that presents foreseeable financial and systemic risks. This has implications for the duties of directors and fiduciaries. Today, boards have to be able to answer questions such as:

- Is our strategy resilient to emerging climate risks?
- Do we have relevant metrics to measure and disclosure climate risks?
- Does our investment analysis account for a carbon price?

There's no perfect tool or approach, the important is to start and ask questions.

5 reasons to put climate governance on your board agenda

Risk management	Investment strategy	Legal duty	Disclosure requirements	Changing regulation

Additional resources

Climate governance education

- Canada Climate Law Initiative | L'Initiative canadienne de droit climatique
- Osgoode Hall Law School Professional Development
- York U
- CB Competent Boards
- Institute of Corporate Directors / Institut des administrateurs de sociétés
- Chapter Zero – The Directors' Climate Forum
- RiA
- TCFD Knowledge Hub – Operated by the Climate Disclosure Standards Board
- Climate Governance Initiative
- ed4s – Education for Sustainability

Disclosure and reporting standards

- TCFD – Task Force on Climate-Related Financial Disclosures
- Value Reporting Foundation – SASB Standards
- PCAF – Partnership for Carbon Accounting Financials
- Greenhouse Gas Protocol
- CDSB – Climate Disclosure Standards Board
- Science Based Targets – Driving Ambitious Corporate Climate Action
- CDP
- IETA – International Emissions Trading Association
- GRESB – The ESG Benchmark for Real Assets

Climate risk and scenario analysis

- GARP – SCR | Sustainability and Climate Risk
- Manifest
- MSCI | Carbon Delta – An MSCI Company
- Four Twenty Seven
- ORTEC Finance
- iea – International Energy Agency
- Trucost ESG Analysis – S&P Global
- Acclimatise – building climate resilience – Willis Towers Watson
- carbone4
- Transition Pathway Initiative
- vivideconomics

Sustainable finance and investment

- IIGCC – The Institutional Investors Group on Climate Change
- Climate Bonds Initiative
- Climate Action 100+
- Institute for Sustainable Finance
- PRI – Principles for Responsible Investment
- PSI – Principles for Sustainable Insurance
- UNEP Finance Initiative – Principles for Responsible Banking
- RiA
- NGFS
- 2° Investing Initiative

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Thank you!

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Appendix

The importance of scenario analysis

STEP 1

Evaluate the significance of each risk

- Political and legal
- Reputation
- Market and technology
- Physical

STEP 2

Define a group of climate scenarios

Develop scenarios for comparison, e.g. two scenarios where the earth's temperature stays at 0°C and that rises at 2°C respectively, by 2100.

STEP 3

Evaluate business impacts

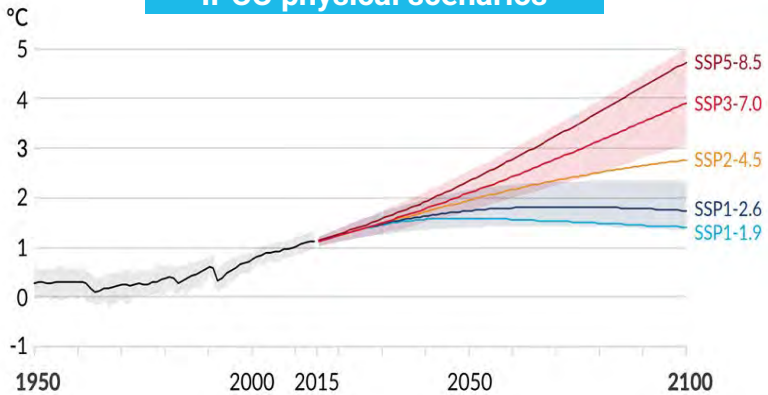
- Input costs
- Operating costs
- Revenues
- Supply chain
- Business interruption
- Timing

STEP 4

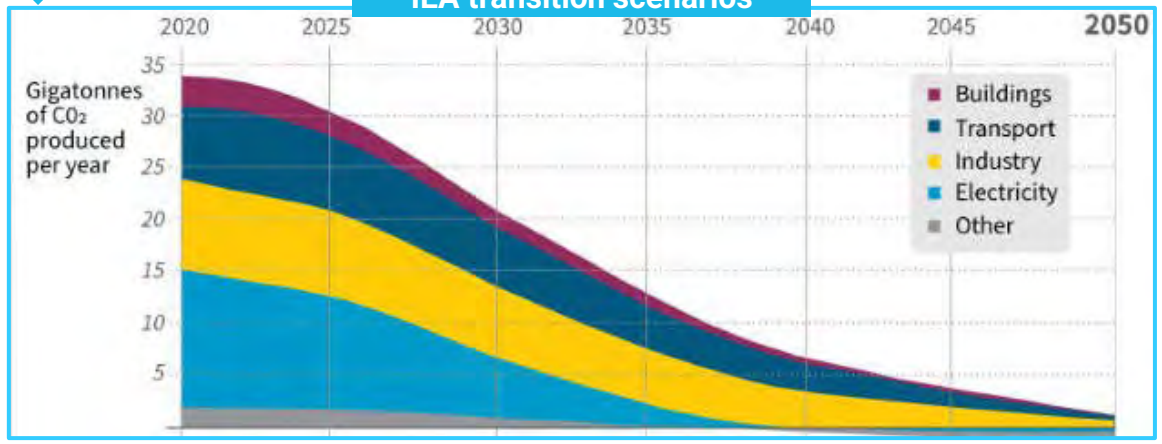
Identify potential responses

- Changes to business model
- Changes to portfolio mix
- Investments in capabilities and technologies

IPCC physical scenarios



IEA transition scenarios

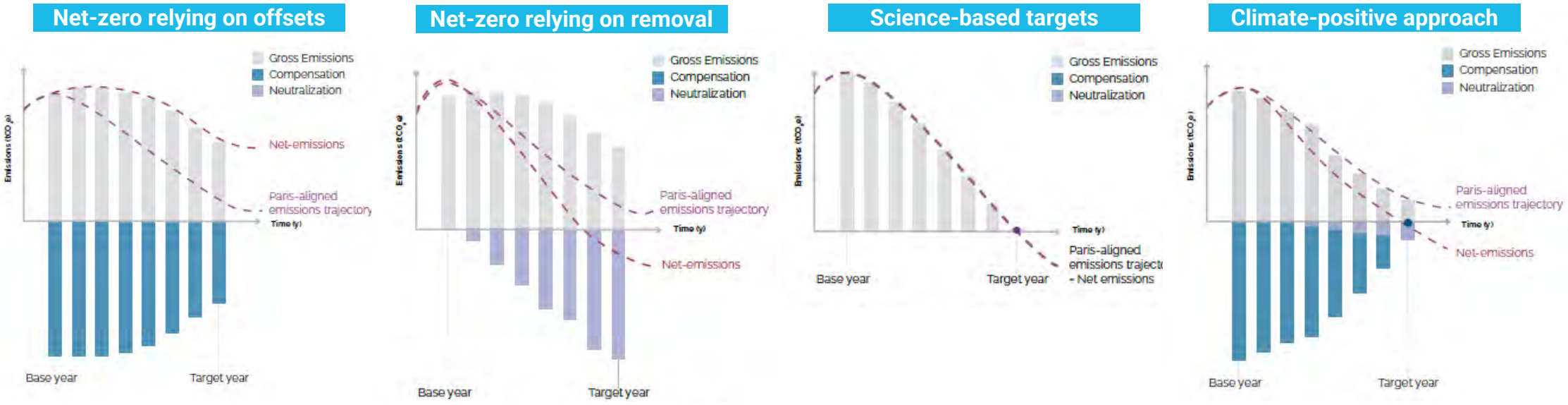


Adapted from TCFD Technical Supplement: The use of scenario analysis in disclosure of climate-related risks and opportunities,

Examples of climate metrics

TCFD PROPOSED METRICS	EXAMPLE UNIT OF MEASURE
GHG emissions: ▪ absolute Scope 1, Scope 2, and material Scope 3 emissions ▪ carbon intensity ▪ weighted average carbon intensity	Mt of CO_2e Mt of CO_2e / per unit of output (e.g. unit of production, employees) Mt of CO_2e / revenue in local currency
Alignment with 2°C or lower temperature pathway	Degree and % (mis)alignment to a 2°C (or other) pathway
Carbon price(s): ▪ shadow/internal ▪ external	Price in local currency, per Mt of CO_2e
Proportion of assets and/or operating, investing, or financing activities: ▪ materially exposed to physical risks ▪ materially exposed to transition risks ▪ aligned towards climate-related opportunities	Percentage
Amount of senior management remuneration impacted by climate considerations	Percentage, amount in local currency, or weighting
Amount of expenditure or capital investment deployed towards climate risks and opportunities	Local currency

Examples of climate targets



Source: Science Based Targets Initiative Foundations for Science-based Net-zero target setting in the corporate sector, 2020, https://sciencebasedtargets.org/resources/files/foundations-for-net-zero-full-paper.pdf

Other types of targets

100% renewable energy: Can reduce energy footprint, but not all carbon is energy (e.g. refrigerants, business travel, waste).

Capex / investment target: Can increase investment in renewable energy, mitigation or adaptation projects.

Alignment with 2°C or lower temperature pathway

Risk exposure: For insurance companies, composition of book by geography, product, sector.