

Canada's Climate Change Adaptation Platform

18th September 2018



#### **Outline**



Exploring Risks and Opportunities in a Changing Climate

Joanna Kyriazis, Zizzo Strategy



Climate Change Disclosure – Enhancing Organizational
Transparency
Sarah Keyes, Chartered Professional Accountants of Canada



Fiduciary Obligations in Business and Investment: Implications of Climate Change

Janis Sarra, University of British Columbia



# Exploring Risks and Opportunities in a Changing Climate

NRCan Adaptation Platform Webinar Series
September 18, 2018

Joanna Kyriazis
Policy Director, Zizzo Strategy

#### **About Zizzo Strategy**

- Multi-disciplinary team of lawyers, business consultants and engineers
- We bridge the gap between law, engineering, technical innovation and real world decision-making.
- Recognized by global leaders as a trusted advisor on climate-related issues
- Cutting-edge solutions set us apart from the risk identification offered by audit firms.

We help our clients stay ahead of the curve and lead where the rest of the market will soon follow.



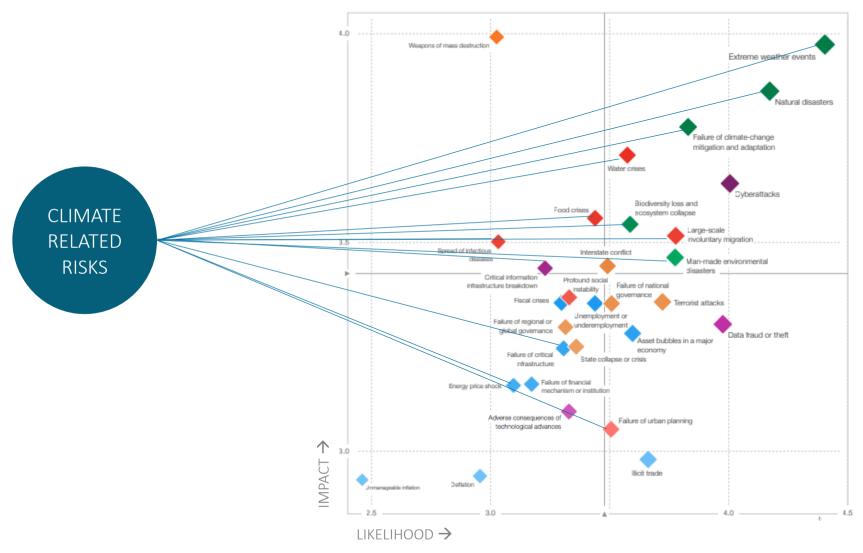
#### Climate risks and opportunities are top of mind

- Extreme weather events in Canada are intensifying, highlighting the financial and social cost of climate change.
- Global temp has already increased by ~1° C
- Global leaders are calling for a fundamental shift toward a financial system that will support a sustainable, climate-resilient economy.
- The transition will be shaped by changes to investor behaviours, policy and technology.
- Significant opportunities to transition and adapt.





# World Economic Forum cites climate-related risks among the world's biggest threats





## The soaring likelihood and impact of environmental risks

(look at increase of green boxes!)

WORLD ECONOMIC FORUM: 2018 GLOBAL RISK REPORT

Figure 1. Evolving risk landscape 2008-2018				
	2008	2013	2018	
Top 5 Global Risks in terms of likelihood	Asset price collapse	Severe income disparity	Extreme weather events	
	Middle East instability	Chronic fiscal imbalances	Natural disasters	
	Failed and failing states	Rising greenhouse gas emissions	Cyberattacks	
	Oil and gas price spike	Water supply crises	Data fraud or theft	
	Chronic disease, developed world	Mismanagement of population ageing	Failure of climate-change mitigation and adaptation	
Top 5 Global Risks in terms of impact	Asset price collapse	Major systemic financial failure	Weapons of mass destruction	
	Retrenchment from globalization (developed)	Water supply crises	Extreme weather events	
	Slowing Chinese economy (<6%)	Chronic fiscal imbalances	Natural disasters	
	Oil and gas price spike	Diffusion of weapons of mass destruction	Failure of climate-change mitigation and adaptation	
	Pandemics	Failure of climate-change mitigation and adaptation	Water crises	
	■ Economic ■ Environmental ■ Geopolitical ■ Societal ■ Technological			

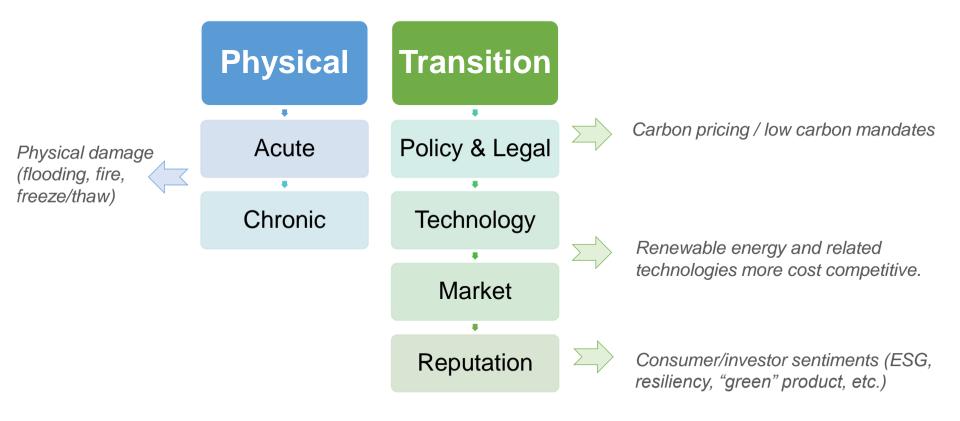




Mark Carney - Governor of the Bank of England, Chair of the Financial Stability Board



# Potential Climate Related Impacts for Organizations





#### Physical Trends – Acute and Chronic



NEWSLETTERS

UNDERPRESSURE85



AdChoices

## A summer of fire, heat and flood puts a focus on adapting to climate change Weatherwatch: nuclear pov

SHAWN MCCARTHY > GLOBAL ENERGY REPORTER
PUBLISHED SEPTEMBER 7, 2018

The deluge flooded downtown streets and basements of high-rise office towers, causing more than \$80-million in damage and nearly drowning two men who were trapped in an elevator with the rising water.

The Aug. 7 downpour in Toronto dropped 72 millimetres of rain in the city centre in a few hours, the kind of storm that is expected only once every 100 years, according to Environment Canada. Bay Street towers, including TD Centre, took on storm water and lost power; service was disrupted at Toronto's commuter hub, Union Station; and ground-floor meeting rooms were under water at the Metro Toronto Convention Centre.

The \$80-million is for insured damages, the Insurance Bureau of Canada said on Friday. Uninsured costs were likely higher, while severe weather across the province has caused more than \$1-billion in insured property damage, the bureau said.

It was a summer of fire, heat and flood in Canada.

## Weatherwatch: nuclear power plants feel the heat

During this summer's heatwave, nuclear reactors in five European countries had to be shut down or put on reduced power



▲ The Muehleberg nuclear power plant in Switzerland cut output by 10% on 27 July, due to the rising water temperature in the nearby Aare River. Photograph: Arnd Wiegmann/Reuters



#### Transition Trends – Policy

## Ottawa's new carbon pricing plan will reward clean companies











Environment Canada is launching public consultations this winter to get feedback to draft legislation

Margo McDiarmid · CBC News · Posted: Jan 15, 2018 4:52 PM ET | Last Updated: January 15





NEWS

Ontario tables bill to repeal cap-andtrade, won't reimburse most costs to businesses

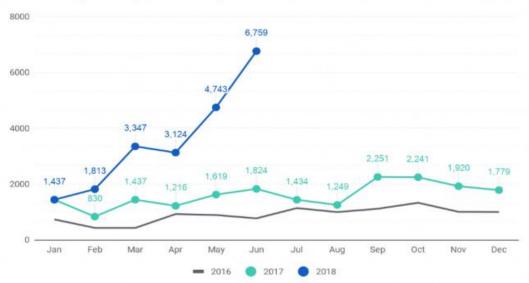
By Marieke Walsh. Published on Jul 25, 2018 2:38pm





#### Transition Trends – Market

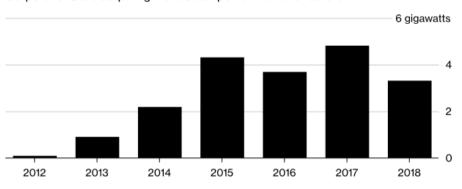
#### Year-over-year Plug-in EV Sales, Canada



Source: FleetCarma 2018

#### **Buying Binge**

Corporations are acquiring more clean power than ever before



Source: Bloomberg New Energy Finance

Note: 2018 total through April 30. All totals are for disclosed deals.



## 2017: Climate-related Disclosure Expectations Rapidly Evolving



Feb. 2017

**London Stock Exchange (LSE) Group** declares the importance integrating climate change-related information into investor reporting and communications.



**July 2017** 

**RBC and TD Bank** join pilot project with 16 leading global banks to pioneer TCFD implementation



Dec. 2017

**TCFD support surges**: Public commitment of support by 237+ companies with market capitalization of >\$6.3T, including over 150 financial firms responsible for assets of over \$81.7T.

Task Force on Climate-Related Financial Disclosure

**(TCFD)** publishes recommendations for mainstream financial reporting.

**June 2017** 

Declaration of Institutional Investors on Climate-Related Financial Risk committed to by 30 institutions representing ~CAD \$1.2T AUM.



Oct. 2017



#### 2018: Climate-Related Risk Initiatives Gains Further Traction



Mar. 2018

Addenda Capital, Aviva, CDPQ, Desjardins Group, Manulife Asset Management join UNEP FI Pilot project on implementing the TCFD recommendations for investors



Apr. 2018

**Canada's Expert Panel on Sustainable Finance** formed to bring climate finance to mainstream capital markets.

April 2018

G7 joint initiative on climate disclosure

CSA Staff Notice 51-354 Report on Climate change-related Disclosure Project.

Apr. 2018



representing over \$6T in AUM agree to speed up implementation of climate-related disclosures under FSB-TCFD framework.





# Identifying Both Risks – and Opportunities

 Financial markets are exposed to climate risks, but also play a crucial role in unlocking economic potential





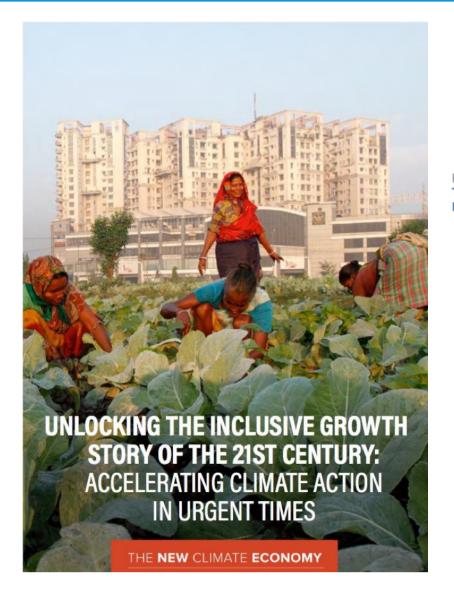
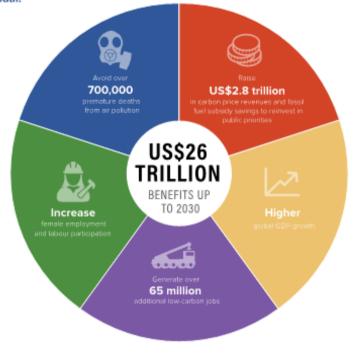


Figure 2
The Global Benefits of a Decisive Shift to a Low-carbon Economy when Compared with Business-as-usual.





#### Benefits of identifying and managing climate impacts



- Better informed investment decisions
- New investment opportunities and revenue streams
- Readiness for regulatory and economic change
- Optimized operational costs

- Internal capacity to respond to climate change
- Asset and supply chain security

- Robust and sustainable enterprise risk management
- Ability to communicate climate resilience to stakeholders



#### The global economy is orienting toward climate resiliency

- Climate impacts are real, imminent, and pose material business impact to every sector.
- Investors are taking climate priorities seriously... and expecting companies to follow suit!
- New products, markets and development opportunities.
- Climate resiliency = significant financial returns.





#### The challenge is twofold:

1/ How will you ensure your organization is managing risks and building climate resiliency?

2/ How will you ensure your organization is seizing climate-related opportunities?





JOANNA KYRIAZIS | POLICY DIRECTOR





## Climate Change Disclosure: Enhancing Corporate Transparency

**SEPTEMBER 18, 2018** 

SARAH KEYES, CPA, CA
PRINCIPAL – RESEARCH, GUIDANCE & SUPPORT
CPA CANADA



#### **About CPA Canada**

- National professional accounting body in Canada
- Over 210,000 members
- Involved in sustainability initiatives for over 25 years



### **Agenda**

- Why is Climate Change Disclosure Important?
- Overview of the Task Force on Climate-Related Financial Disclosures (TCFD) Recommendations
- Recent Studies on Climate Change Disclosure in Canada



Why is Climate Change Disclosure Important?

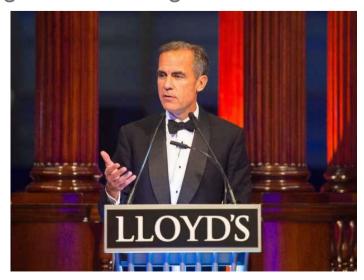


## **Converging Trends**

- Paris Agreement
  - Pan-Canadian Framework on Climate Change & Clean Growth
- World Economic Forum
  - ➤ Global Risks Report
- Sustainable Development Goals (SDGs)
  - > Climate Action
- Climate change impacts and associated costs
- Shifting consumer and employee values
- Real-time information via non-traditional channels

#### **Financial Stability Concerns**

Bank of England Governor Mark Carney said investors need to wake up to the potential for huge losses from a sudden shift in regulations designed to curb global warming and the use of fossil fuels.



"The challenges currently posed by climate change pale in significance compared with what might come...

...Once climate change becomes a defining issue for financial stability, it may already be too late."

Source: http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx

# Overview of the Task Force on Climate-Related Financial Disclosures (TCFD)

#### Why was the TCFD Established?



Source: Task Force on Climate-related Financial Disclosures, <a href="https://www.fsb-tcfd.org/about/#">https://www.fsb-tcfd.org/about/#</a>

- Established by Mark Carney, Chair of the Financial Stability Board in December 2015
- Chaired by Michael Bloomberg
- 32 task force members include by providers of capital, insurers, large nonfinancial public companies, accounting and consulting firms, and credit rating agencies
- Mandate to develop voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders

#### **TCFD Overview Video**



www.cpacanada.ca/TCFD



#### **4 Categories of TCFD Recommendations**

#### 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

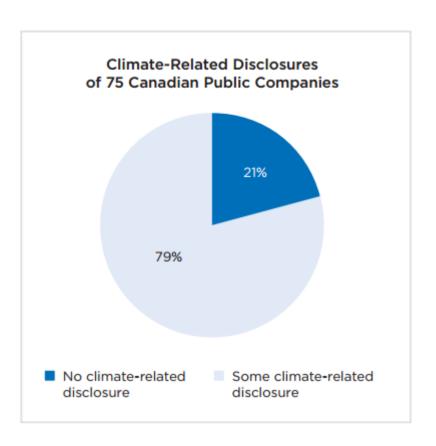




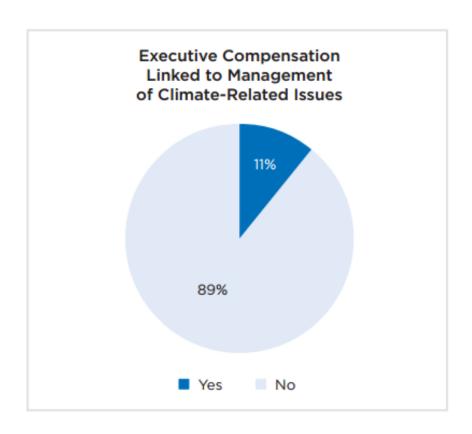
# Recent Studies on Climate Change Disclosure in Canada

#### **CPA Canada Study: Overall Key Findings**

- The majority of companies are making climate-related disclosures, but the nature and extent varies:
  - Climate-related disclosures did not provide sufficient context
  - Disclosures were not comparable across or within industries
  - Inconsistent use of terminology
  - Users are challenged to locate relevant information



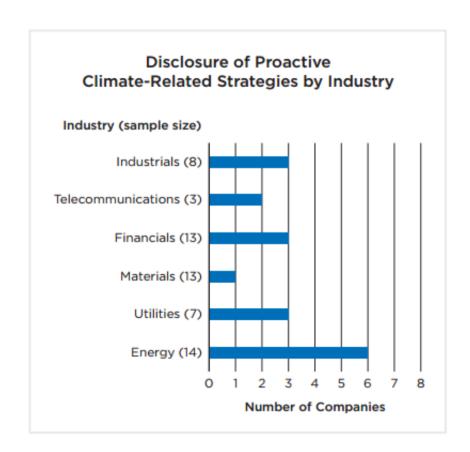
#### **CPA Canada Study: Governance Disclosure**



Less than one third of companies made specific disclosure of board or senior management oversight of climate-related issues.

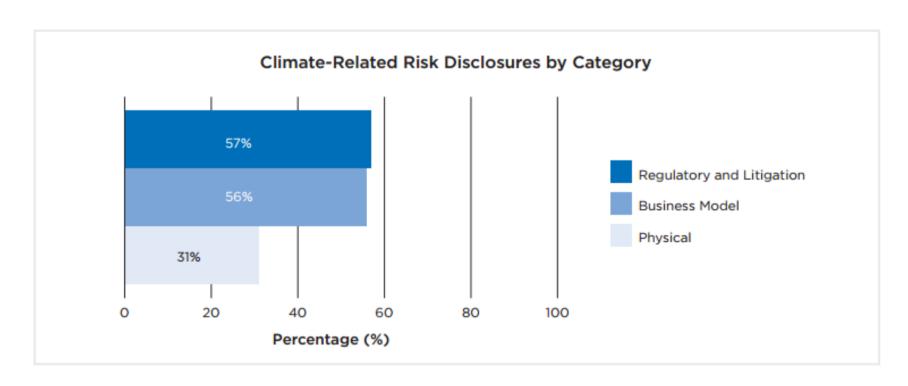
#### **CPA Canada Study: Strategy Disclosure**

One quarter of companies disclosed proactive strategies to deal with the transition to a low-carbon economy.



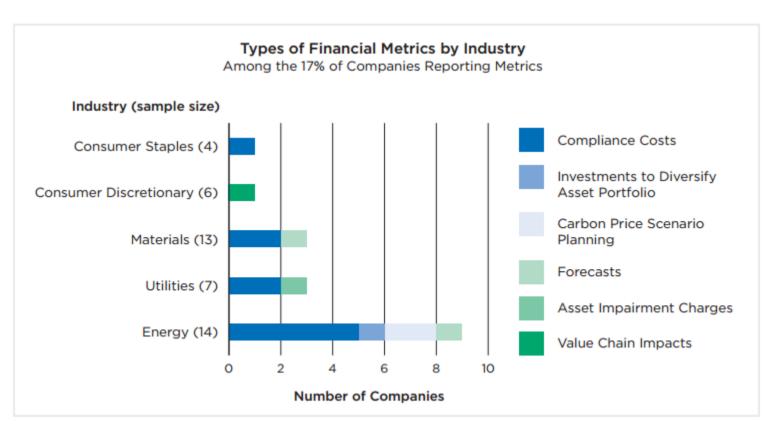
#### **CPA Canada Study: Risk Disclosure**

Climate-related disclosures focused most commonly on risks related to greenhouse gas emissions **regulations**.



# **CPA Canada Study: Metrics & Targets Disclosure**

The majority of climate-related disclosures did not include financial metrics or targets.



#### **CPA Canada Study: Conclusion**

Our study results indicate an opportunity for enhanced climate-related disclosures and possible alignment with the TCFD recommendations.



\*Is there a disclosure gap or is the issue related to the application of materiality definitions in the context of climate change?

# Canadian Securities Administrators (CSA) Review of Climate Disclosures

- Project Objectives:
  - Assess whether Canadian securities legislation and related guidance are sufficient for issuers to determine what climate change-related disclosures they should provide
  - Better understand what climate change-related information investors need to make informed voting and investment decisions
  - Determine whether or not issuers are providing appropriate disclosures in this regard
- Initiated in March 2017; Final report issued in April 2018



### **CSA Project Overview**

#### Scope

- Disclosure mandatory and voluntary reports
- Survey anonymous to all TSX-listed issuers
- Consultations 50+ including focus groups
- Research existing climate disclosure requirements

#### Key Themes

- Materiality
- Current Disclosure Practices
- Dissatisfaction with State of Disclosure
- Concerns about Mandatory Disclosure Requirements

#### Next Steps

- Guidance & Education
- Focus on Risk Governance & Oversight
- Monitoring of Climate-related Disclosures



#### **Thank You**

#### **Contact Information:**

Sarah Keyes, CPA, CA Principal – Research, Guidance & Support CPA Canada Email: skeyes@cpacanada.ca



#### **Appendix: CPA Canada Resources**

Climate-related Disclosure Study

CPA Canada TCFD overview video & webpage

Joy Thomas Interview with Mark Carney on TCFD Recommendations

Climate Change Briefing for Directors

Primer for CPAs on GHG Emissions Management

**Are Canadian Businesses Managing GHG Emissions?** 

Climate Change Adaptation Case Studies & Briefs on Roles for CPAs

Accounting for Cap and Trade Systems





#### Climate Change and Legal Risk

Dr. Janis Sarra University of British Columbia

NRCan webinar Sept 18, 2018

#### CCLI – Canada

Cynthia Williams, Disclosure of Information Concerning Climate Change: Liability Risks and Opportunities

Janis Sarra, Fiduciary Obligations in Business and Investment: Implications of Climate Change

Sarra and Williams, Directors' Liability and Climate Risk: Canada - Country Paper: Commonwealth Climate and Law Initiative (CCLI)

Climate change - litigation risks and good governance practice Canadian law as currently framed can be a driver for positive action on climate change

We acknowledge the generous support of the  $I\ V\ E\ Y\ f\ o\ u\ n\ d\ a\ t\ i\ o\ n$ 

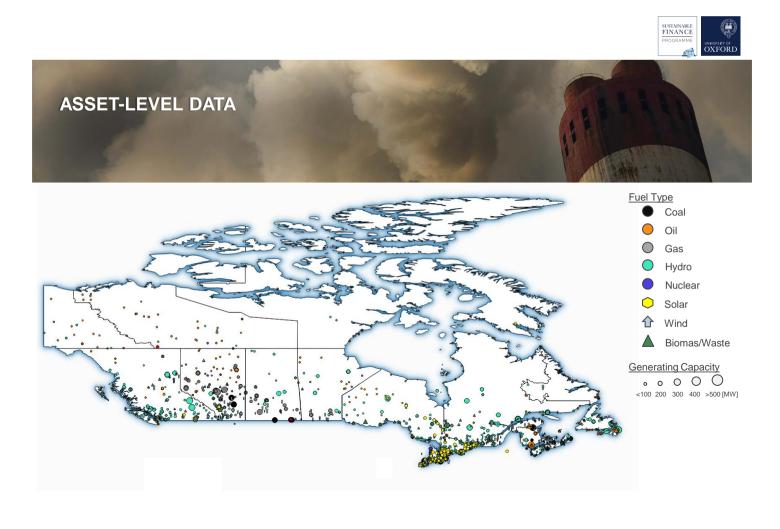


# Scientific evidence of responsibility improving

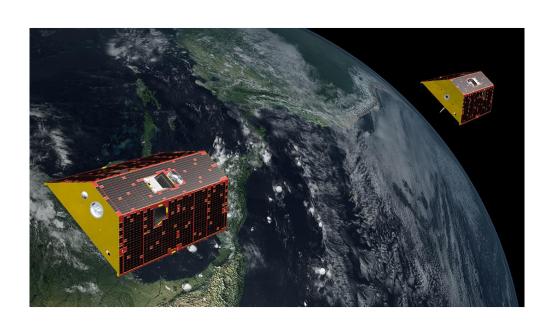
Frumhoff, Heede, & Oreskes, *The climate* responsibilities of industrial carbon producers, 2017 found:

90 largest industrial carbon producers' products are responsible for 63% of all known industrial greenhouse gas emissions

Specific attribution of emissions per company can allow the evidentiary basis for tort-law claims against the companies, as evidenced by cases proliferating in the US



Lucas Kruitwagen



#### NASA

Gravity Recovery and Climate Experiment Follow-On (GRACE-FO), NASA's latest Earthobserving satellite mission launched May 22, 2018

## Disclosure liability risks

Cynthia Williams' study examines current requirements and quality of current climate disclosure by Canadian public companies, and the expectations of investors.

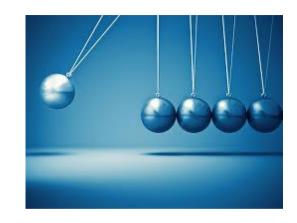
Litigation on climate-related risk is most likely to arise in the context of securities disclosure obligations.

TCFD has reported that climate-related risks include financial and reputational risks related to transition to lower-carbon economy and risks related to the physical impacts of climate change



## Momentum internationally regarding climate change governance and disclosure

Over 250 organizations support TCFD recommendations EC Action Plan for financing sustainable growth 2018 Canada's Expert Panel on Sustainable Finance to report soon.



#### Fiduciary obligation

In fulfilling obligation to act in the best interests of the company, directors and officers must directly engage with developments in knowledge regarding physical and transition risks related to climate change and how may impact their corporation.

- > undertake efforts to identify any relevant risks to their business from climate change and climate change policies;
- > put appropriate strategies in place to manage these risks;
- > oversee and monitor actions of the individuals charged with managing these risks;
- > mechanisms in place to respond rapidly to changes in the company's risk profile.

Depending on the firm's economic activities, the risk may be minor or highly significant.

## Duty of care

Duty of care requires directors and officers to supervise transition that will address the specific risks, as well as the new opportunities, posed by climate change.

## Why Canada is vulnerable

Canada's fossil fuel sector generates 7.7% of Canada's GDP

Oil and gas sector was the largest GHG emitter in Canada, accounting for 26% of total GHG emissions,

Large growth in orphan wells (2061 as of Sept 2018), due to low commodity prices, environmental factors and an unprecedented number of corporate failures in the oil and gas sector. 80% increase in these stranded assets.

Securities law unclear.



### Materiality

Materiality underpins much of the transparency requirements of Canadian securities law Important question is whether need to have different understanding of "materiality" that recognizes the scale of risk, longer timelines, and impact of failing to act

In some instances, material changes are contingent or uncertain, although directors and officers of the corporation may have some information

Disclosure relating to corporate governance is not subject to a materiality standard in Canada; climate-change disclosure should be treated similarly.

## Breach of fiduciary obligation

To date, there is no jurisprudence in Canada that expressly clarifies fiduciary obligation regarding climate risk, but existing Supreme Court of Canada judgments make clear that the obligations of fiduciaries are contextual and broad enough to recognize such a duty.

"every director and officer of a corporation in exercising their powers and discharging their duties shall exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances."

The SCC held in *BCE* that, in executing its duty of loyalty to the corporation, the board of directors was required to reflect on the interests of the corporation both as an economic actor and as a "good corporate citizen"



#### Oppression remedies



Oppression remedy under corporate statutes creates remedy that "seeks to ensure fairness – what is just and equitable"

Pegged to "reasonable expectations" regarding whether directors acts in manner that was oppressive, unfairly prejudicial to, or unfairly disregarded the interests of any security holder, creditor, director or officer

In determining best interests of the corporation, may be appropriate to consider the impact of corporate decisions on shareholders or particular groups of stakeholders

### Proactive governance is best defence

Directors are given broad authority to address climate change risk, and provided that decisions taken are within range of reasonableness, courts will defer to their business judgment.



## Courts may ask....



Did the directors identify potential transition risks and physical risks from climate change and climate change policies?

Did they develop an ongoing process or program for monitoring risk and compliance?

Did directors and officers develop appropriate strategies in place to manage the climate-related risks?

Did they supervise employees carrying out emissions related activities and mitigation or adaptation activities?

Did they ensure remedial and contingency plans are in place for acute events?

#### Pension trustees and investment fiduciaries

Pension funds will potentially lose significant value of their investments if they do not act as prudent investors by recognizing climate change financial risk.

2011 Mercer report estimated up to 10% of a fund's portfolio risk exposure within next 20 years will arise from climate change impacts.



## Disclosure requirements - pension trustees and investment fiduciaries

France La Loi de transition énergetique pour la croissance verte requires institutional investors, including mutual funds and pension funds, to disclose annually the financial risks related to the effects of climate change and measures to reduce them, including how they are implementing a low-carbon strategy in every component of their activities, and how their corporate and investment decision-making is contributing to the energy and ecological transition to limit global warming.

At least 6 other countries to date.



#### Canadian Pension trustees/fiduciaries

Pension fund trustees and their investment managers have a fiduciary obligation to pension beneficiaries to act prudently in their best interests in making investment decisions regarding fund portfolios. Both statutory and common law.

Pension fund fiduciaries must make their investment strategy decisions based on a time frame commensurate with the pension plan's liabilities.

Prudential obligations require the fiduciary to undertake a careful and thorough evaluation of climate change risk prior to making decisions on information generated.

Ontario *Pension Benefits Act* requires pension funds to disclose information about whether environmental, social and governance factors are incorporated into the plan's investment policies and procedures and, if so, how. O Reg 235/14, s. 8.

#### Canadian Pension trustees/fiduciaries

In determining asset allocation between short-term and long-term investments, the duty of care precludes short-term investments that prejudice long-term investments, as the fund must be sustained over the long-term and thus trustees must take account of systemic risks such as climate change, particularly in balancing intergenerational interests.

If trustees fail to act to address material climate change risk, they may be personally liable for breach of their fiduciary obligation.

Fiduciaries have a duty to act even where the potential costs and benefits of climate change cannot be fully quantified immediately.



#### "The Status of Climate Change Litigation"

UNEP and Columbia Law School, May 2017

As of March 2017 climate change cases had been filed in 24 countries (25 if one counts the European Union), with 654 cases filed in the US and over 230 cases filed in all other countries combined.

Cases in Canada - mostly challenges to permits—not yet targeting officers and directors.

Suits against governments on mitigation commitments: Urgenda Foundation v. Kingdom of the Netherlands

## What types of investor climate change cases are being brought?

#### Shareholder actions for failure to disclose:

Commonwealth Bank of Australia suit alleging directors' report did not adequately inform investors of climate change risks, that CBA ought to have had business strategies to manage climate change business risks and disclosed so that investors could make an informed assessment of operations, financial position, and prospects for future financial years.

Class action on behalf of purchasers of Exxon Mobil Corporation common stock alleging Exxon directors and officers violated US securities law re failed to disclose that Exxon's own internally generated reports concerning climate change recognized the risks associated with global warming and climate change, the inability of the company to extract existing hydrocarbon reserves and therefore, a material portion of Exxon's reserves were stranded and should have been written down.

#### Consumer protection litigation risk to corporate assets

Consumer protection legislation may be used to hold companies accountable for failing to adequately disclose risks associated with climate change.

Canadian class-action lawsuit against Volkswagen for its cheating emissions testing received Ontario court approval of a \$2.1 billion settlement plan for the 105,000 purchasers and individuals leasing VW vehicles in Canada.



## Moving forward...

Fiduciaries should embed mitigation and adaptation strategies in corporate decisions and investment portfolio management, and track implementation and outcomes.

Companies should provide robust, credible and detailed accounts of their management of climate risk.

Trustees need knowledge to hold investment managers and advisers to account on climate-related issues.

Fiduciary obligation requires considering the benefits of investment in green adaption and mitigation technologies - low carbon energy, new products and services likely to have upside financial potential for return on investment.





THANK YOU

JANIS SARRA



## **Questions?**



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Survey

https://www.surveymonkey.com/r/NRCan\_Webinar\_1\_EN

**Sondage** 

https://www.surveymonkey.com/r/NRCan\_Webinar\_1\_FR



