CANADIAN BUSINESS FOR CLIMATE POLICY

Insurance, risk and adaptation

The financial sector and its role in supporting adaptation & long-term energy transition

10 March, 2020

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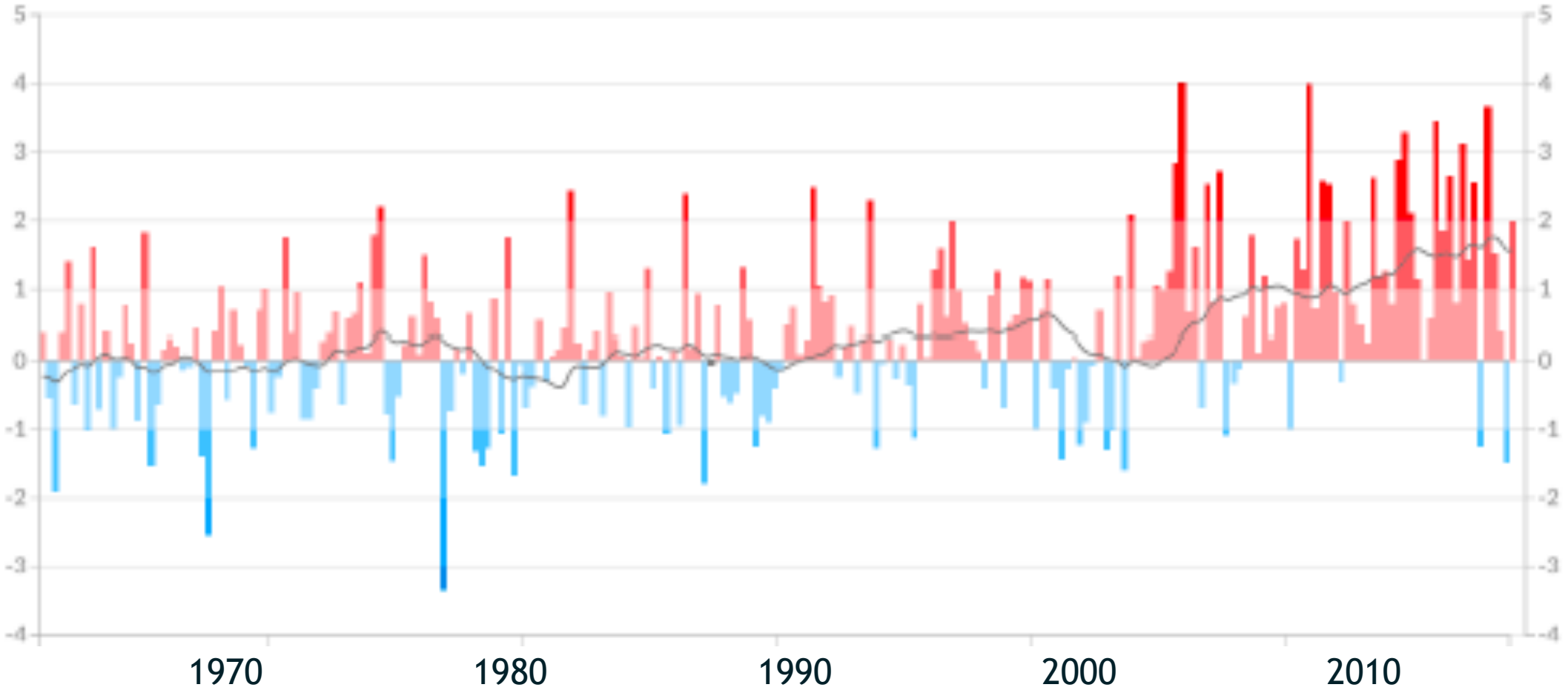
Actuaries Climate Index – water, drought, heat, cold, wind and sea level change



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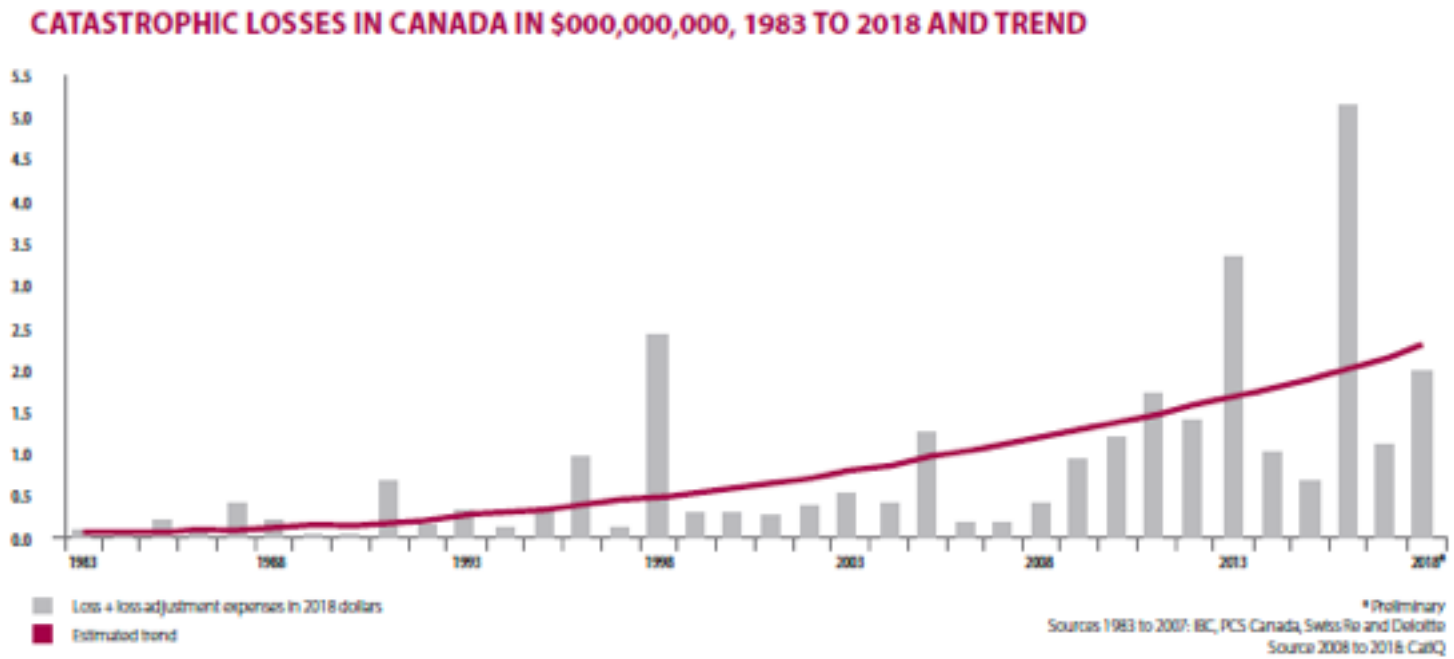
Trends in Insured Costs for Severe Weather



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Adaptation

- What are the challenges to municipal infrastructure from a changing climate?
  - More frequent freezing and thawing causing damage to roads, sidewalks, bridges and stormwater ponds.
  - Overburdened stormwater systems caused by intense precipitation events.
  - Damage to transportation infrastructure and public property due to flooding.
  - Damage to electrical distribution systems and parks and greenspaces as a result of more severe storms.

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Adaptation

- Auditor General & Public Safety in 2016 estimates that for every $1 invested in adaptation, it saves $3 - $5 in recovery costs
  - "Duff's Ditch" (Red/Assiniboine flood diversion) cost $63mm in 1963 – estimates for total savings by 2008 = $8 bn
- For water risk, adaptation investments include grey infrastructure (storm & waste systems) and "green" infrastructure (wetlands, forests, shorelines, permeable pavement)
  - Grey infrastructure has dominated municipal and engineering studies for decades and often puts green infrastructure at a disadvantage when estimating costs & benefits
- Intact Centre on Adaptation estimates that natural wetlands can reduce the costs of flooding in urban centres by 38% and rural settings by 29%.
- IBC and the CFM estimates (2020) that the average investment required by municipalities to adapt to the cost of a changing climate will equal $5.3 billion annually
- There are significant opportunity costs to these investments (vs. schools, hospitals, roads etc)

Framework for Natural Infrastructure Project Implementation

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Role of the financial sector in long-term energy transitions

- BofE Governor Mark Carney – September 2015 "Tragedy of the Horizon"
  - How do governments and markets respond to signals beyond normal planning horizons
- Task Force on Climate-Related Financial Disclosures announced December 2015 – June 2017 Recommendations released
- Network for Greening the Financial System – Central banks December 2017
- 2020 will be the year that Canada begins to discuss how best to implement "climate screens" on the risk and business decisions to be made by banks, insurers, asset managers
- Will begin to affect the availability and cost of capital for the real economy
- Will affect how firms respond to price signals and how business decisions are made

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Thank you

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