Designing the Path to Climate Compatibility: Climate Risk Disclosure and Action in the Canadian Housing Context

In collaboration with:

IBC
Insurance Bureau of Canada

CMHC SCHL

Canada

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Methodology

This research study utilizes a Strategic Foresight Practice approach incorporating marketplace scanning research related to natural hazard in the Canadian housing context. Forecasts and alternative futures exploration and analysis are central to this study. The techniques used for stakeholder engagement during the study are based on academic best practices in human centred design research and service design.

About Insurance Bureau of Canada (IBC)

IBC is the national industry association for the vast majority of auto, property and business insurers operating in Canada. For more information visit: ibc.ca

Acknowledgments

This research study was made possible by the contributions and insights of leaders across the Canadian housing supply chain including industry associations, financial institutions, insurers, governments and others.

Citation

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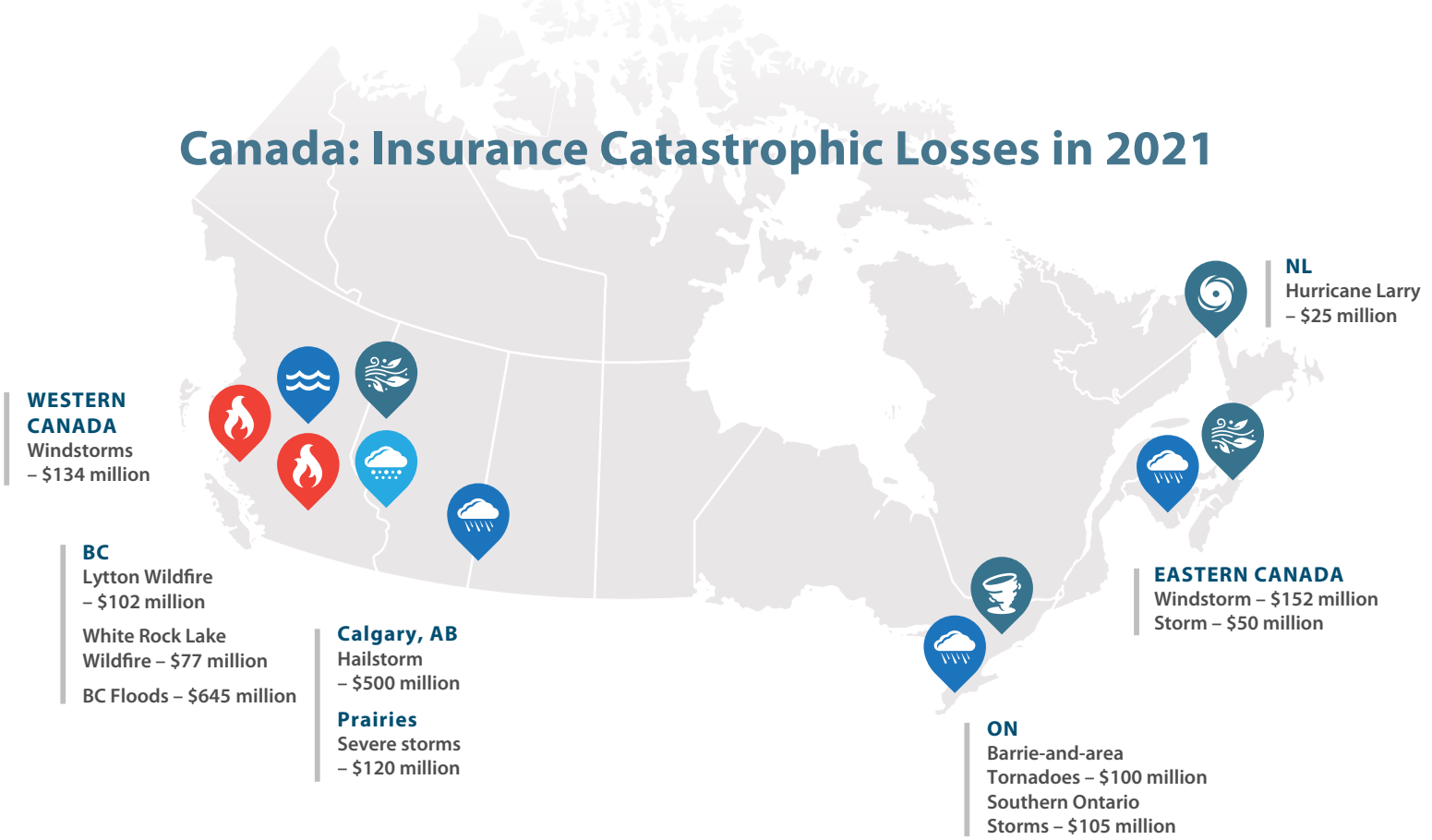
Canada: Insurance Catastrophic Losses in 2021



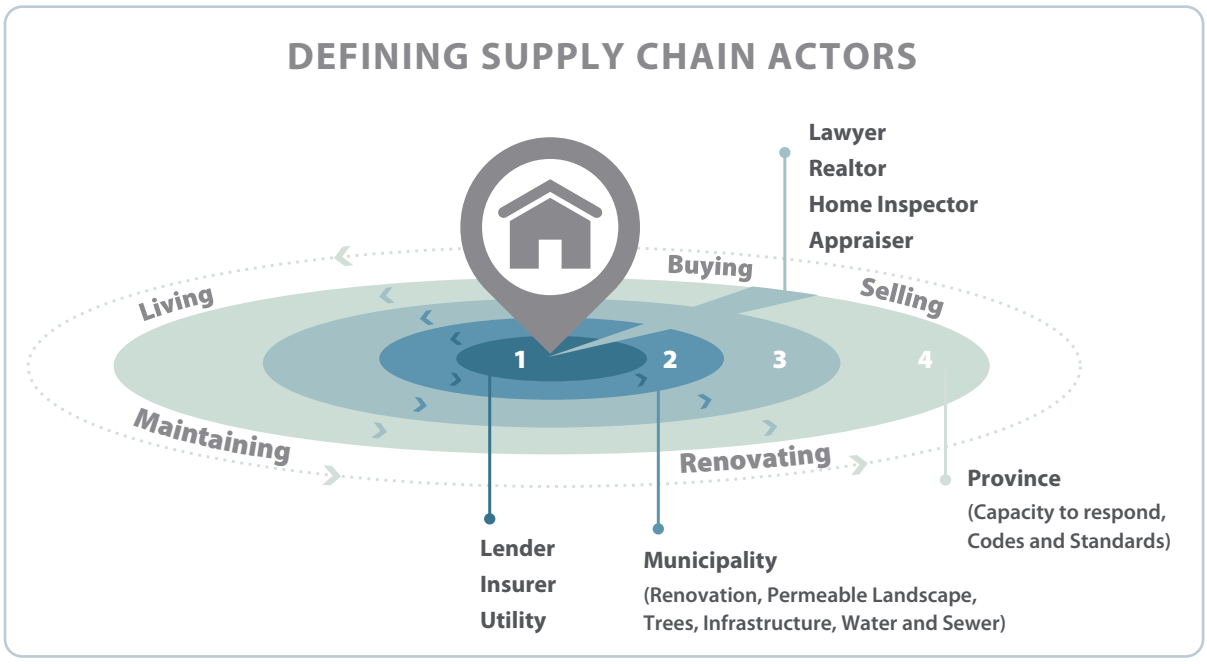
TERMS	MEANING
Climate Compatible	Resilient and net zero by 2050.
Net zero	Net Zero Homes are defined as homes that produce as much clean energy as they consume annually, using on-site renewable energy systems.
Climate resilience	The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance that is being exacerbated or amplified by climate change. Climate resilience implies that a system can cope effectively in a future state where the rate of change is dynamic and uncertain. Climate adaptation technically means coping with a future state that is static and knowable. Although resilience is a favoured term, adaptation and resilience are typically used interchangeably.
Resilient infrastructure investments	Infrastructure investments that address physical climate risks, improving a community or property's ability to cope with these future hazards.
Natural Hazards	Severe weather events such as floods, windstorms and wildfires that have the potential to damage infrastructure and housing. Hazard assessment is a fundamental step in resilience planning and is complemented by evaluation of community exposure (which takes into account community defenses) and personal vulnerability (which takes into account socio-economic factors).
Climate-Risk	The broad term referring to natural hazards, exposure and vulnerability related to both slow onset events e.g., sea level rise and acute severe weather events being exacerbated by anthropogenic climate change.
Anthropogenic	Environmental change caused or influenced by human activity, either directly or indirectly.
Natural infrastructure	Naturally occurring landscape features and/or nature-based solutions that promote, use, restore or emulate natural ecological processes and that increase climate resilience and/or enhance reduction of greenhouse gases.

Designing the path to climate compatibility: Climate risk disclosure and action in the Canadian housing context

Insurance Bureau of Canada (IBC) and the Canada Mortgage and Housing Corporation (CMHC) joined forces in the fall of 2021 to examine disclosure of physical hazards and climate risk in the Canadian housing context. This collaboration was motivated by the need to respond to the accelerated frequency and severity of catastrophic loss events in the housing finance system, as well as the need to create an aligned view of climate risks for homeowners.

Access to reliable climate-related data, metrics and information is critical for housing and financial sector participants to assess, price and manage climate-related risks. Climate risk data and analytics can assist homeowners, builders, the financial sector and governments to mobilize capital toward effective and efficient property-level climate resilience and prioritize community-level adaptation investments.

An aligned view of risk is essential to achieving a climate-compatible housing system in Canada before 2050.



In December 2021, IBC and CMHC co-hosted an event that leveraged findings from a series of one-on-one interviews with 16 leaders in the housing supply chain, which framed a service design workshop. Thirty participants across the housing and financial industries were invited to shape a framework to communicate natural hazards and climate risk to Canadian homeowners and develop tools to use across the housing finance and insurance sectors. The virtual event was structured to include three categories of discussion: disclosure of risk, policy framework and housing supply chain.

The interviews and workshop revealed broad consensus that disclosure of natural hazard and climate risk is urgently and critically needed in Canadian housing markets. The findings, which IBC is exploring further, include:

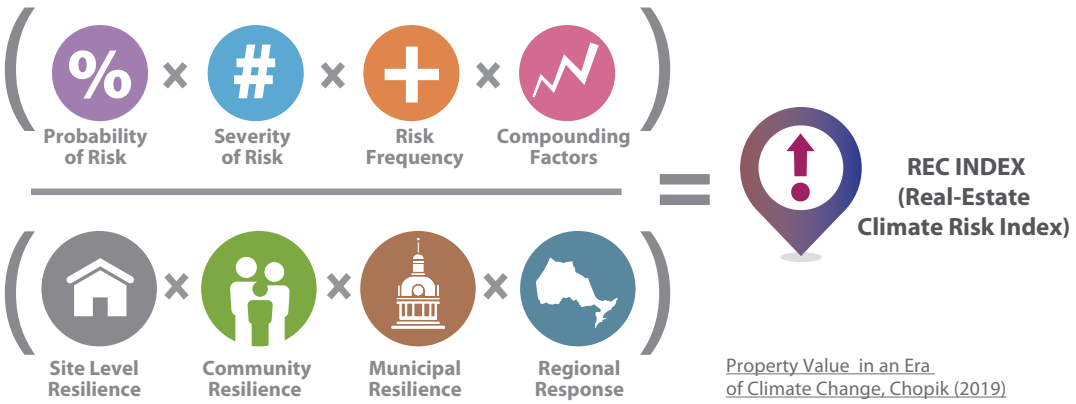
- The importance of connecting known risks to an **Action Matrix**
- Ensuring information is accessible and easily interpreted by consumers, e.g. a **Climate Score**
- The responsibility of all housing supply chain actors and sectors to educate the homeowner marketplace with a shared and aligned view of risk.

1. **An Action Matrix –** response by all actors means that key drivers from all parties in the housing supply chain are aligned to the risk. Lenders, insurers, municipalities and homeowners, have an aligned view of risk and can understand how to invest in a property or community in order to reduce risk. Communicating this in an understandable and consistent way from all aspects of the housing supply chain is critical to achieving climate compatibility by 2050.

2. **Real Estate Index for Climate Risk –** imagine a Credit Score for Climate Risk... a comprehensive score that offers an understandable and actionable account of a location's susceptibility to catastrophic loss. It would allow all actors in the housing supply chain to respond consistently to climate risk. This process would start with understanding the risks and leads to managing the risk with consistent and persistent reduction of household, community and municipal risk, coupled with improved regional planning and emergency response capacity.

LIKE A CREDIT SCORE FOR CLIMATE-RISK

CALCULATING THE NVP OF CLIMATE RISK



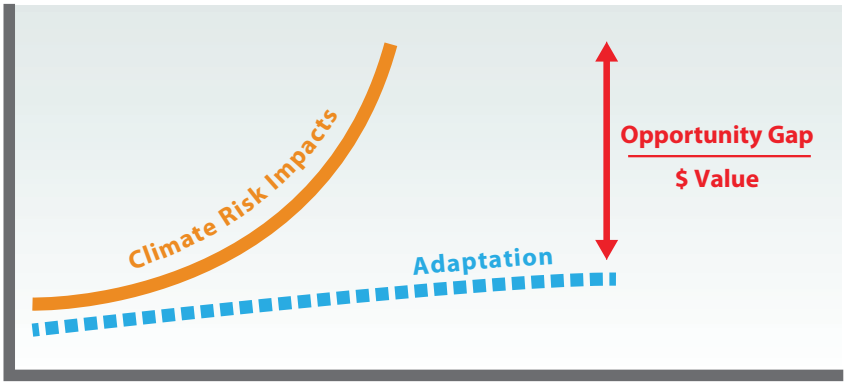
Property Value in an Era of Climate Change, Chopik (2019)

Guiding principles emerging from the design workshop

- Disclosure needs to be understandable and lead to a contextual action matrix that include all actors in the Canadian housing supply chain.
- Every context is different, and requires different resiliency measures. Risk reduction measures should be applied at site- and community-level, and as part of regional planning and emergency response.
- When possible natural infrastructure should be included in resiliency investment.
- Resiliency planning should be applied to achieve fast and efficient recovery in locations where natural hazards are seasonal or persistent.
- Disclosure needs to be universal (common language, used by all supply chain actors) in order to eliminate moral hazard and predatory behavior.
- Every actor in the housing supply chain has a responsibility to communicate to homeowners throughout the home ownership lifecycle. Ideally language consistency and asset centric value proposition is consistent across sectors, e.g. use of terms 'protect your asset' 'future-proof', 'climate compatible', 'resilient', and 'net-zero'.

REAL ESTATE ASSET VALUE

UNITING MOTIVE TO CLIMATE RESILENCE



(Pathways to the Future in Ontario, Chopik, et al, 2019)

Key insights from IBC-CMHC Climate Risk Disclosure Study

INSIGHTS FROM THE INTERVIEWS

The overall sentiment reflected from the research: there is an urgent and important need for disclosure of natural hazard and climate risk in the homeownership context in Canada.

> *"There is an urgent and important need for disclosure of natural hazard and climate risk in the homeownership context in Canada"*

Most participants said there was capability within their business practice to disclose natural hazard and climate risk, IF the information was available and understandable.

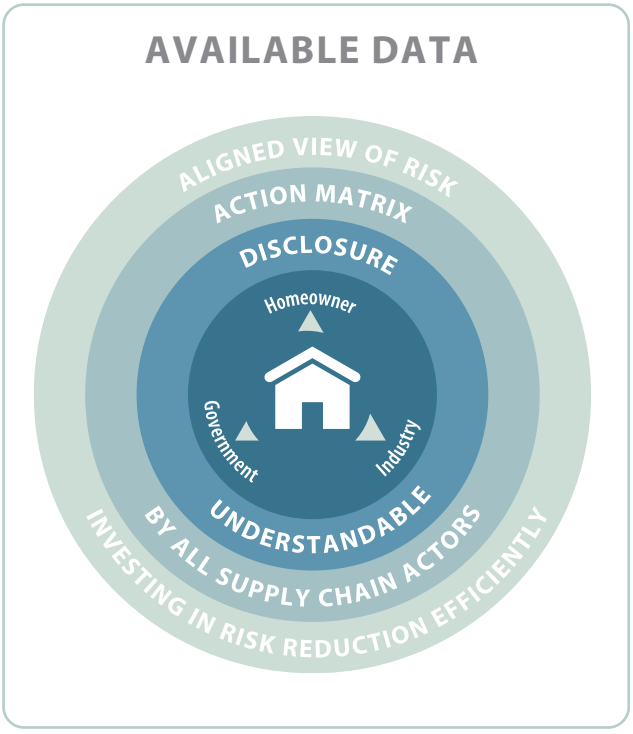
Needs to be sooner than 2050 - catastrophic loss impacts to people, their homes and communities are increasing in severity and risk while the marketplace fails to act.

"Whose job is disclosure?" Most said "it's everyone's job" and a consistent response across interviews was "government must take the lead".

Need to move beyond knowing the risk, into action. Insights for action include codes and standards, climate data, and tools including contextual guides for action against specific climate hazards.

Consideration must be given to the negative impact that climate risk disclosure could have on property values in some locations.

Marketplace literacy needs improvement, must be part of the action matrix.



Tensions around land-use planning decisions – new developments need to avoid, address and disclose risk.

Complex data must be understood by average people, must be transparent, and widely accessible to consumers.

BARRIERS TO DISCLOSURE

- Privacy laws and devaluation of properties
- Alignment required at all levels of government
- Constraints at bank level
- Double Materiality - re building resilience at the household and community level
- Would lenders and REALTOR®s include climate risk in listing, sale and mortgage qualification?
- Caution re: fair implementation of any incentive or regulation not tried on a large scale and the implication on other neighbourhoods, e.g., drop in value, stigma

ACTIONS

In each of the three areas of discussion, urgency was a concern, and action within 12-18 month timeframe was deemed essential.

Disclosure of Risk

- Training for all actors
- Create an action matrix for community, municipality and homeowners. May include divestment and planned retreat
- Urgent need to update flood maps and assemble maps for all natural hazards and climate risks

Housing Supply Chain

- Agreement on a process – complex
- Risk action matrix, by lenders and insurers, compliance or by homeowner, disclosure has a path to reducing risk
- Summarize state of knowledge of existing climate risk to help understand future risk
- Focus on existing communities and existing buildings

Policy Framework

- Create single source of disclosure data that is open/ transparent/reliable and accessible.
- Essential to have a property level database that is able to incorporate feedback/ information about individual property risk and mitigation.
- Local and regional governments to be on the forefront of disclosure and risk

NEXT STEPS

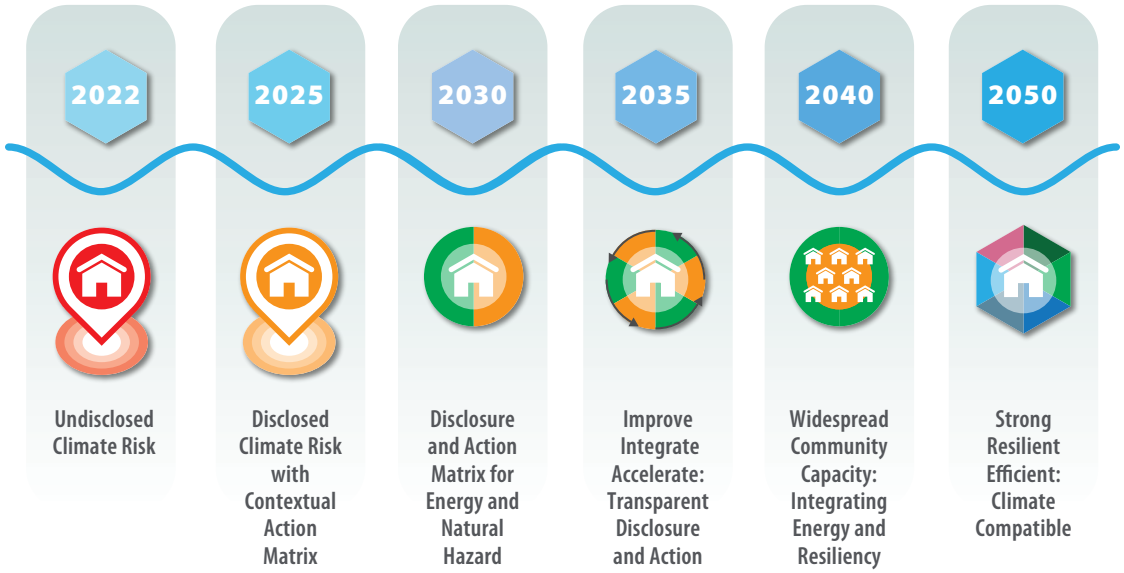
Immediate timeframe

- Make information publicly accessible – as fast as possible
- Outline federal government's role and communicate it
- Establish a timetable on when funding would be available to allow time for local risk assessments and plans to apply for funding
- Involve municipalities for a better idea of local needs
- Ensure transparency on informing regional governments and builders from the beginning
- Incentive by federal government as well as provincial, municipal, etc. to drive action

12 - 18 months

- Explore MLS integration possibilities with the Canadian Real Estate Association
- Co-develop consistent protocol of engagement for lenders & insurers
- Collect and centrally communicate technical how-to data for action matrix
- Secure funding for data and adjusting/accommodating privacy laws
- Create a state of play – establish what products/programs/standards/best practices are available to reduce risk

ROADMAP TO CLIMATE COMPATIBILITY IN THE CANADIAN HOUSING CONTEXT – CLIMATE RISK AND TRANSITION TO NET ZERO TIMELINE



TIMELINE

2022

- Call for Disclosure - no more high risk development

2025

- Establishment of Canadian Climate Compatibility Scoring Framework building off foundation established by EnerGuide but extended to cover Resilience
- Disclosure initiated of all known natural hazards and climate risks in the Canadian housing context, and connected climate action matrix guides

2028

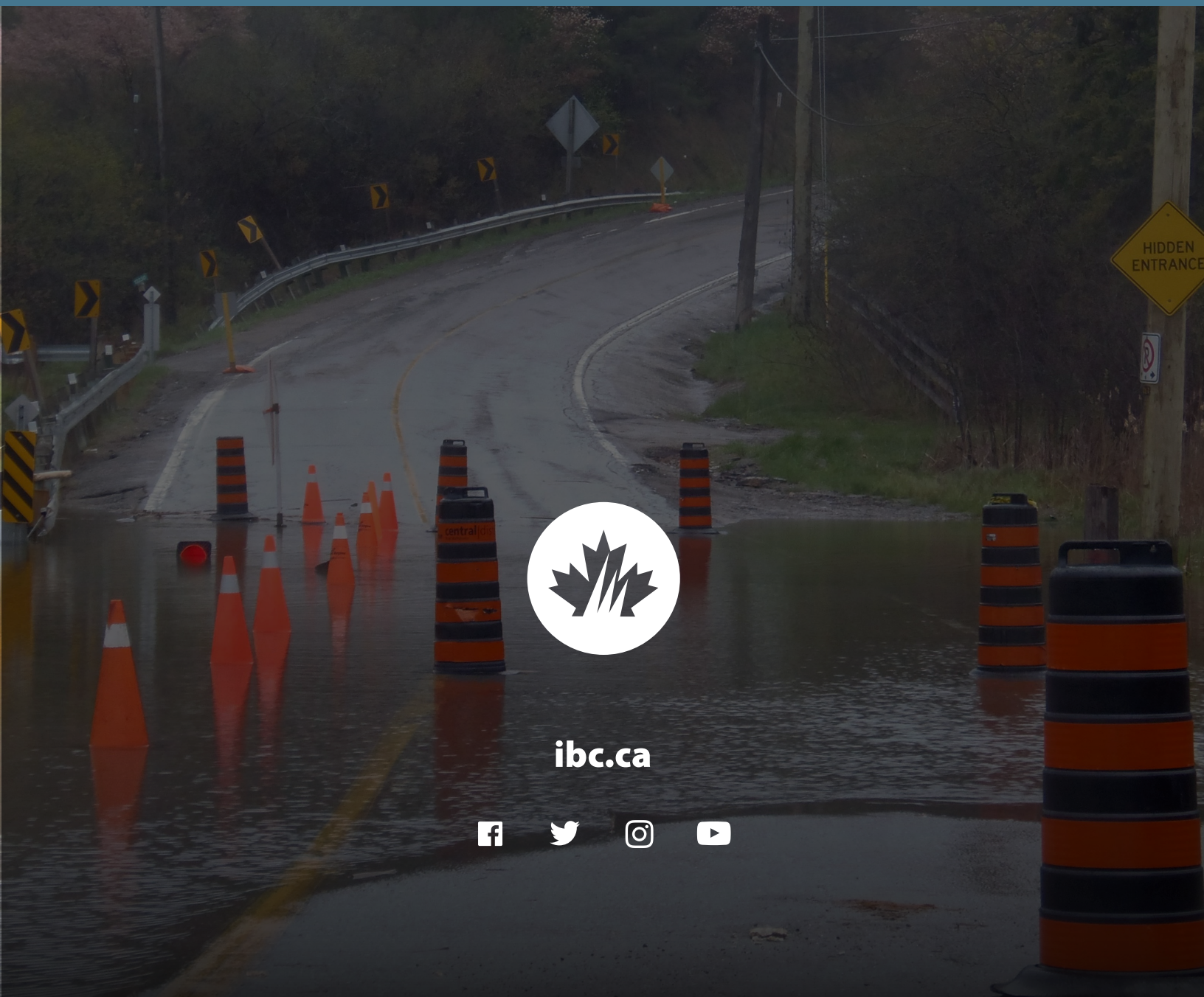
- Application of Canadian Climate Compatibility Framework helps fulfil National Adaptation Strategy targets while driving Climate Compatibility 2050 targets

2030

- Adaptive Planning to incorporate learnings from disaster response and recovery
- Scaled and consistent Energy and Resiliency retrofit programming available for all homes in Canada

2050

- Climate Compatible Canadian Communities, Resilient and Energy Efficient



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