

WHAT IS CLIMATE ADAPTATION POLICY?

Introduction to Climate Adaptation for Professionals

Vancouver Island University

2020

**Module 1: Foundations of Climate Change
Policy**

OUTLINE

- What is climate policy, and what is climate adaptation policy?
- What is the purpose of climate adaptation policy?
- Challenges with climate change adaptation policy
- Opportunities in climate change adaptation policy

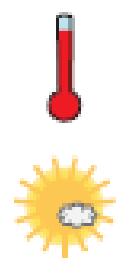














WHAT IS CLIMATE POLICY

“...a course of action or inaction chosen by public authorities to address the problem of climate change” (from Pal, 2010, p. 2)

WHAT IS CLIMATE ADAPTATION POLICY

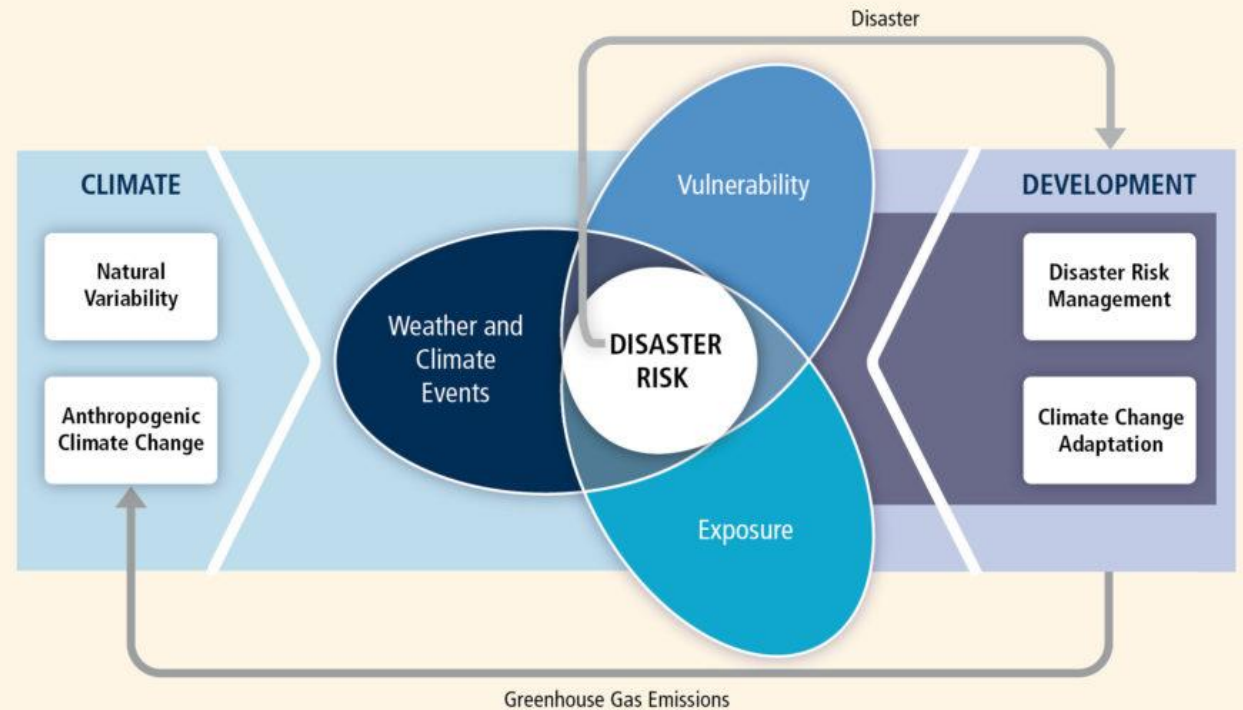
- “...a course of action or inaction chosen by public authorities to address the problem of **adapting to** climate change” (from Pal, 2010, p. 2)
- “policy (is) **an adaptation opportunity**...an enabling factor to enhance the potential for actors to plan and implement actions to achieve their adaptation objectives” (Klein et al, 2014)

North America

Key risk	Adaptation issues & prospects	Climatic drivers	Timeframe	Risk & potential for adaptation		
<p>Wildfire-induced loss of ecosystem integrity, property loss, human morbidity, and mortality as a result of increased drying trend and temperature trend (<i>high confidence</i>)</p> <p>[26.4, 26.8, Box 26-2]</p>	<ul style="list-style-type: none"> Some ecosystems are more fire-adapted than others. Forest managers and municipal planners are increasingly incorporating fire protection measures (e.g., prescribed burning, introduction of resilient vegetation). Institutional capacity to support ecosystem adaptation is limited. Adaptation of human settlements is constrained by rapid private property development in high-risk areas and by limited household-level adaptive capacity. Agroforestry can be an effective strategy for reduction of slash and burn practices in Mexico. 			Very low	Medium	Very high
			Present			
			Near term (2030–2040)			
			Long term (2080–2100)	2°C		
			4°C			
<p>Heat-related human mortality (<i>high confidence</i>)</p> <p>[26.6, 26.8]</p>	<ul style="list-style-type: none"> Residential air conditioning (A/C) can effectively reduce risk. However, availability and usage of A/C is highly variable and is subject to complete loss during power failures. Vulnerable populations include athletes and outdoor workers for whom A/C is not available. Community- and household-scale adaptations have the potential to reduce exposure to heat extremes via family support, early heat warning systems, cooling centers, greening, and high-albedo surfaces. 			Very low	Medium	Very high
			Present			
			Near term (2030–2040)			
			Long term (2080–2100)	2°C		
			4°C			
<p>Urban floods in riverine and coastal areas, inducing property and infrastructure damage; supply chain, ecosystem, and social system disruption; public health impacts; and water quality impairment, due to sea level rise, extreme precipitation, and cyclones (<i>high confidence</i>)</p> <p>[26.2-4, 26.8]</p>	<ul style="list-style-type: none"> Implementing management of urban drainage is expensive and disruptive to urban areas. Low-regret strategies with co-benefits include less impervious surfaces leading to more groundwater recharge, green infrastructure, and rooftop gardens. Sea level rise increases water elevations in coastal outfalls, which impedes drainage. In many cases, older rainfall design standards are being used that need to be updated to reflect current climate conditions. Conservation of wetlands, including mangroves, and land-use planning strategies can reduce the intensity of flood events. 			Very low	Medium	Very high
			Present			
			Near term (2030–2040)			
			Long term (2080–2100)	2°C		
			4°C			

WHAT IS THE PURPOSE OF CLIMATE ADAPTATION POLICY? (AN EXAMPLE)

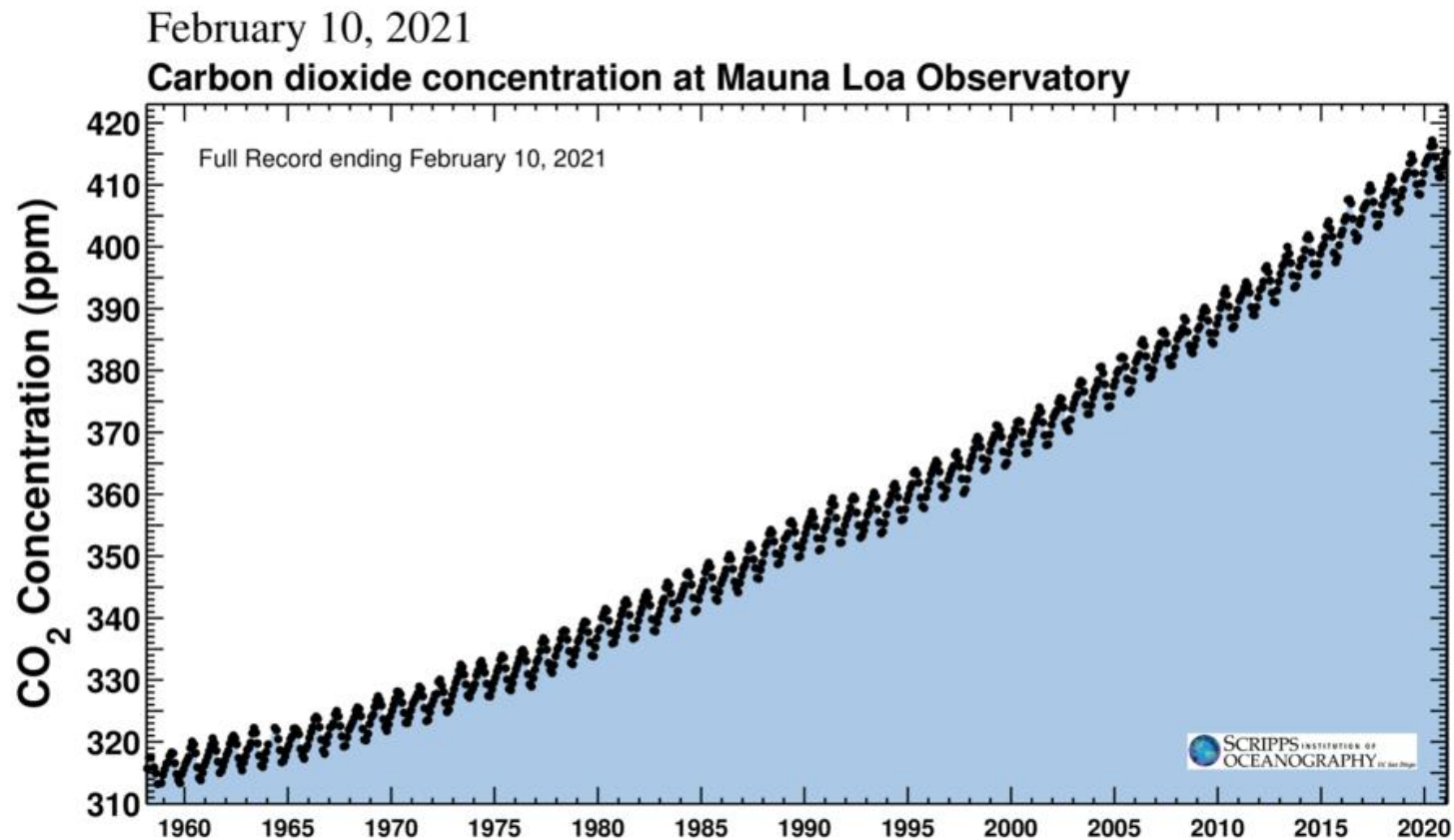
1. To prevent exposure
2. To reduce vulnerability
3. To increase resilience



CHALLENGES WITH CLIMATE CHANGE ADAPTATION POLICY

I. MITIGATION AS A SOCIETAL PRIORITY

The Keeling Curve



CHALLENGES WITH CLIMATE CHANGE ADAPTATION POLICY

2. GAPS IN TOOLS AND STRATEGIES

The following are the objectives of Canada's *Federal Adaptation Policy Framework*:

1. Canadians understand the relevance of climate change and associated impacts on their quality of life.
2. Canadians have the necessary tools to adapt to climate change effectively.
3. The federal government, as an institution, is resilient to a changing climate.

Having a policy framework is a good first step. However, each of these represents a broad policy area in which further design, development and implementation must still be done.

OPPORTUNITIES WITH CLIMATE CHANGE ADAPTATION POLICY

1. Less politics and partisanship? (maybe)
2. Less issue complexity and more local visibility
3. Many interventions are clearer, more short term
4. Doesn't conflict as much with other agendas
5. Has a clear social justice component

SOME REFERENCES

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