

CANADIAN
CENTRE FOR
CLIMATE
SERVICES

CENTRE
CANADIEN DES
SERVICES
CLIMATIQUES



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

Delivering climate services to enable adaptation

Heather Morrison, Sarah Rayfield and Trevor Murdock

Canadian Centre for Climate Services

4th International Climate Change Adaptation Platforms Meeting

Tokyo, Japan

December 15, 2023

Who We Are

Canadian Centre for Climate Services (CCCS)

Providing information and support to consider climate change in decision-making



Increase awareness and access to climate data



Provide training and guidance



Engage with users to understand needs

CCCS provides access to the foundational scientific data needed to implement actions across all key systems of Canada's National Adaptation Strategy

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Climate Services in Canada

Environment and Climate
Change Canada (ECCC)

Climate Change
Adaptation Policy

Canadian Centre for
Climate Services

S&T
Branch

Climate
Research

Meteorological
Service of
Canada



**PACIFIC CLIMATE
IMPACTS CONSORTIUM**



ClimateWest



CLIMAtlantic



**ORCCA
CRACO**



OURANOS

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ClimateData.ca - Information Portal

ONLINE SERVICE DELIVERY



High resolution climate data



Temperature and precipitation variables and climate indices



Custom tools to analyze and extract data



Learning Zone



Impacts and Risks

EXTREME HEAT EVENTS



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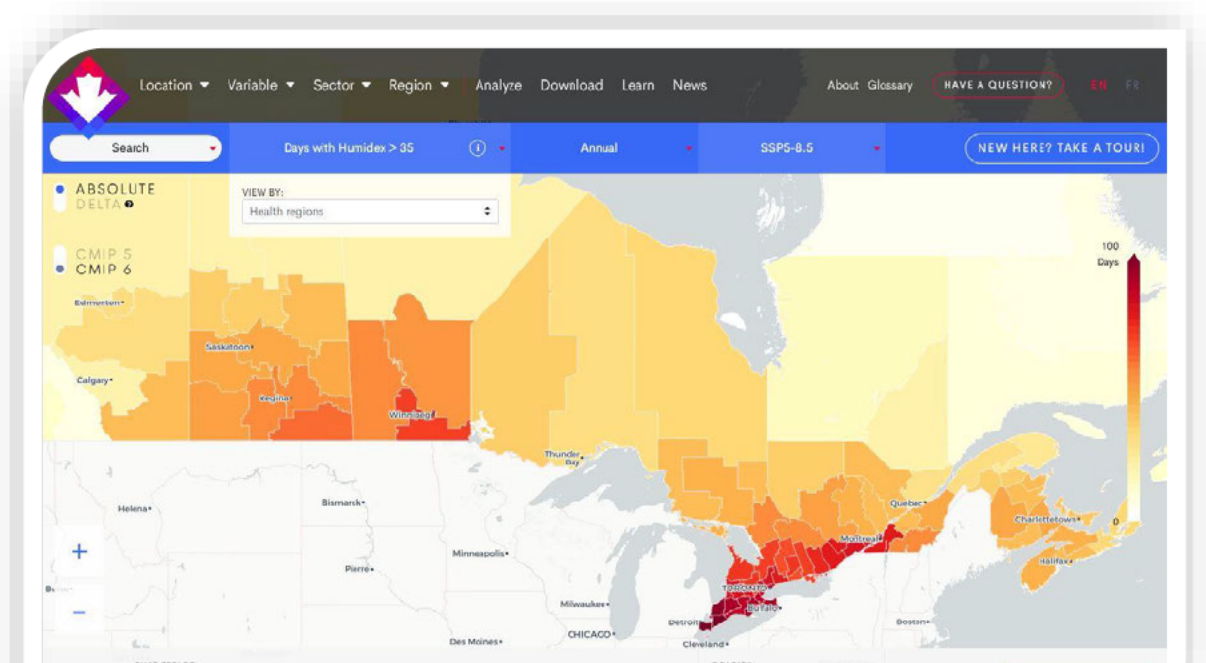
ClimateData.ca

HUMIDEX PROJECTIONS

Humidex is used to understand how summer weather can impact human health

New dataset shows how often people are likely to experience discomfort, caution, or extreme caution days due to hot and humid weather

Data available by local health regions



Impacts and Risks

FLOODING



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FUTURE SHIFTED IDF INFORMATION

Climate change has intensified extreme rainfall events, this trend is expected to continue into the future

CCCS conducted targeted engagement to understand needs from regional service providers and professionals (engineers), related to extreme precipitation

E.g., a rainfall intensity of 34 mm/hr, persisting for 1 hour, is expected to occur on average every 100 years

Duration	2 year_me	5 year_me	10 year_n	25 year_m	50 year_r	100 year_median	2 year_10th_percentile
5 min	83	106	121	141	155	170	76
10 min	57	71	81	94	103	112	52
15 min	45	58	67	77	85	93	41
30 min	28	37	42	50	55	61	25
1 h	16	21	24	28	31	34	15
2 h	10	12	14	15	17	18	9
6 h	5	6	7	8	8	9	4
12 h	3	4	4	5	6	6	3
24 h	2	2	3	3	3	4	2
5 min_95%	15	25	34	46	55	64	14
10 min_95%	10	16	22	29	35	41	9

Outreach

Blog


Newsletter

Social media

Speaker series

Podcast (pilot)

Targeted outreach campaigns



NEW AND NOTEWORTHY

Buildings climate zones

NOUVEAUTÉ À NOTER

Zones climatiques des bâtiments

July 20, 2023

Unveiling new Buildings Climate Zones data: Step one towards climate resilient infrastructure



NEW AND NOTEWORTHY

Canadian Spatial Analogues Tool

NOUVEAUTÉ À NOTER

Outil des analogues spatiaux canadiens

September 29, 2023

Major new release: Canadian Spatial Analogues Tool



CLIMATE DATA IN ACTION


Impact of climate change in Newfoundland and Labrador

LES DONNÉES CLIMATIQUES EN ACTION

L'impact du changement climatique à Terre-Neuve-et-Labrador

August 24, 2023

Understanding Climate Change's Impact in Newfoundland and Labrador



CLIMATE DATA IN ACTION

Bringing climate data to your neighbourhood

LES DONNÉES CLIMATIQUES EN ACTION

Les données climatiques appliquées à votre voisinage

June 19, 2023

Bringing Climate Data to Your Neighbourhood: Tools for Local-Level Adaptation



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JOIN THE CONVERSATION

Suivi Donneesclimatiques.ca

PARTICIPEZ À LA CONVERSATION

July 12, 2023

Follow ClimateData.ca on social media



Resources for agriculture

GET CLIMATE SMART

Secteur agricole

RESEIGNEZ-VOUS SUR LES CHANGEMENTS CLIMATIQUES

July 27, 2023

Get Climate Smart: resources for the agricultural sector

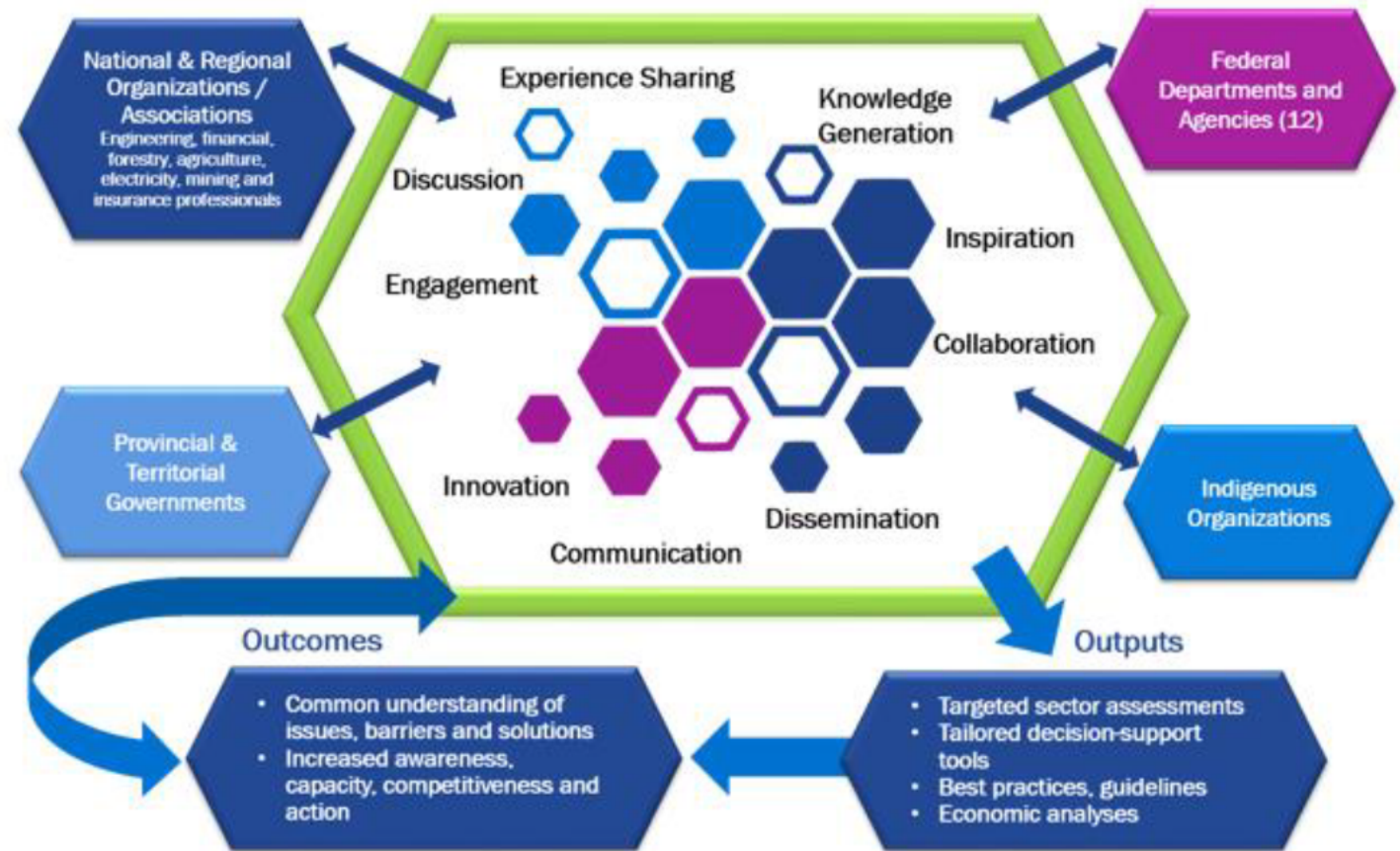
Adaptation Platform

Established in 2012

National forum that brings together key groups in Canada

Cross-jurisdictional, multi-disciplinary action

Creates enabling environment for adaptation



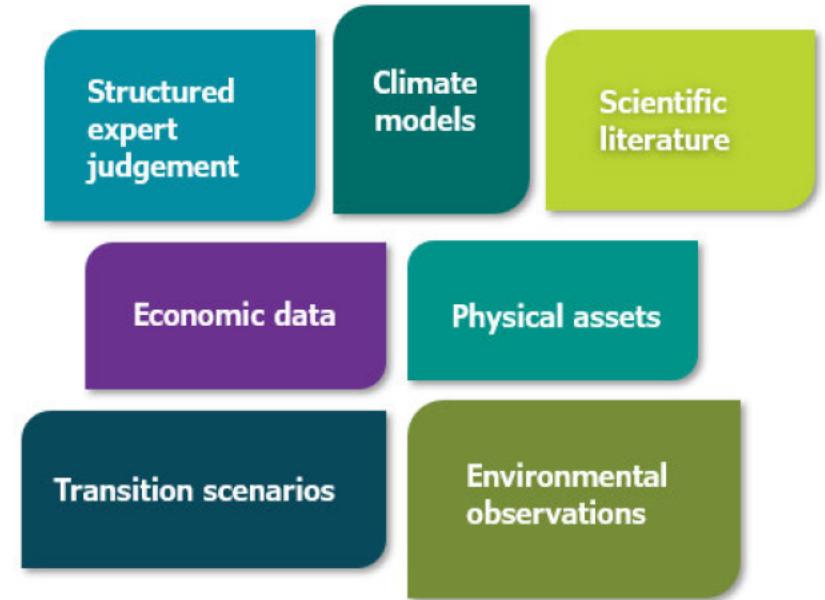
Climate Data Strategy

Growing need for mandatory climate risk disclosure, including Financial Service sector, to measure both physical and transition risks

Increasing international effort on climate-related financial disclosure, consistent with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD)

Climate Data Strategy will respond to and align with rapidly changing regulatory landscape (domestically and internationally)

Need for rigorous, standardized and publicly accessible data to assess and compare risks, and for standardized and transparent methodologies



"...develop a climate data strategy to ensure that the private sector and communities have access to data to inform planning and infrastructure investments."

Ministerial Mandate letter – Minister of Environment and

Path Forward

Strive to meet the growing demand for user-centric, climate change data driven by an increased understanding of climate change impacts and the implementation of policies such as mandatory climate risk disclosure

Expand our service offerings to include seasonal-to-decadal climate data products and services

Increase our scientific capacity to project extreme events and develop and deliver climate data products and services that capitalize on these scientific advancements

Continue to develop sector-specific climate data products and services

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THANK YOU



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