



## The Regional Municipality of Durham

### Committee of the Whole Revised Agenda

Wednesday, April 10, 2024, 9:30 a.m.

Regional Council Chambers

Regional Headquarters Building

605 Rossland Road East, Whitby

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2097.

Note: This meeting will be held in a hybrid meeting format with electronic and in-person participation. Committee meetings may be [viewed via live streaming](#).

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	Pages
1. Roll Call	
2. Declarations of Pecuniary Interest	
3. Statutory Public Meetings	
There are no statutory public meetings	
4. Presentations	
4.1 Climate Change Education Session	
a. Sandra Austin, Executive Director, Strategic Initiatives Re: Climate Emergency Context - Imperative for Action	
*b. Bryan Purcell, Vice President Policy and Programs, The Atmospheric Fund Re: Overview of Climate Mitigation Action in the GTHA - Regional Context  Link to <a href="#">Carbon Emissions Inventory Report - 2022</a>	4
*c. Don Iveson, Co-Chair, Task Force for Housing and Climate, and Executive Advisor, Co-Operators Insurance Re: Task Force for Housing & Climate - Blueprint for More and Better Housing Report  Link to <a href="#">Blueprint For More And Better Housing</a>	18
*d. Jennifer Alsop, Director Brilliant Energy Institute, Ontario Tech	33

University and Sam Sadeghi, Vice President, Asset Management and Distribution Operations, Elexicon Energy  
Re: Perspectives from the Durham Climate Roundtable on Electrification and the Energy Transition

e. 15 Minute Break

\*f. Al Douglas, President, Climate Risk Institute 46  
Re: Climate Adaptation 101 and Strategic Directions for Future Work

## 5. Delegations

\*5.1 Linda Gasser, Whitby Resident (Virtual Attendance) 128  
Re: 2024 Annual Climate Change Progress Report (2024-COW-12) [Item 7.1]

\*5.2 Wendy Bracken, Clarington Resident (Virtual Attendance)  
Re: 2024 Annual Climate Change Progress Report (2024-COW-12) [Item 7.1]

## 6. Correspondence

## 7. Reports

7.1 Report #2024-COW-12 138  
2024 Annual Climate Change Progress Report

7.2 Report #2024-COW-13 162  
Sole Source Procurement for the Economic Study to undertake the analysis necessary to prepare the Region of Durham for the future prescribed Bill 131 Background Study

7.3 Report #2024-COW-14 168  
The Region of Durham's response to the Ontario Regulatory Registry posting related to the "Proposal to create regulation to support implementation of the GO Transit Station Funding Act, 2023"

7.4 Report #2024-COW-15 187  
Recommendations for Eligible Projects Under the At Home Incentive Program for Affordable Housing

7.5 Report #2024-COW-16 203  
Request for Funding from Kawartha Conservation Authority for the Acquisition of Land in the Township of Scugog (PT LT 19 Con 14, Reach; parts 2, 3, and 5, Plan 40R32476)

## 8. Confidential Matters

There are no confidential matters to be considered

## 9. Adjournment

Notice regarding collection, use and disclosure of personal information:

Written information (either paper or electronic) that you send to Durham Regional Council or Committees, including home address, phone numbers and email addresses, will become part of the public record. This also includes oral submissions at meetings. If you have any questions about the collection of information, please contact the Regional Clerk/Director of Legislative Services.



April 10, 2024

# GTHA Emissions Inventory

## *Focus on Durham*

Durham Regional Council



BUILDINGS

TRANSPORTATION

INDUSTRY

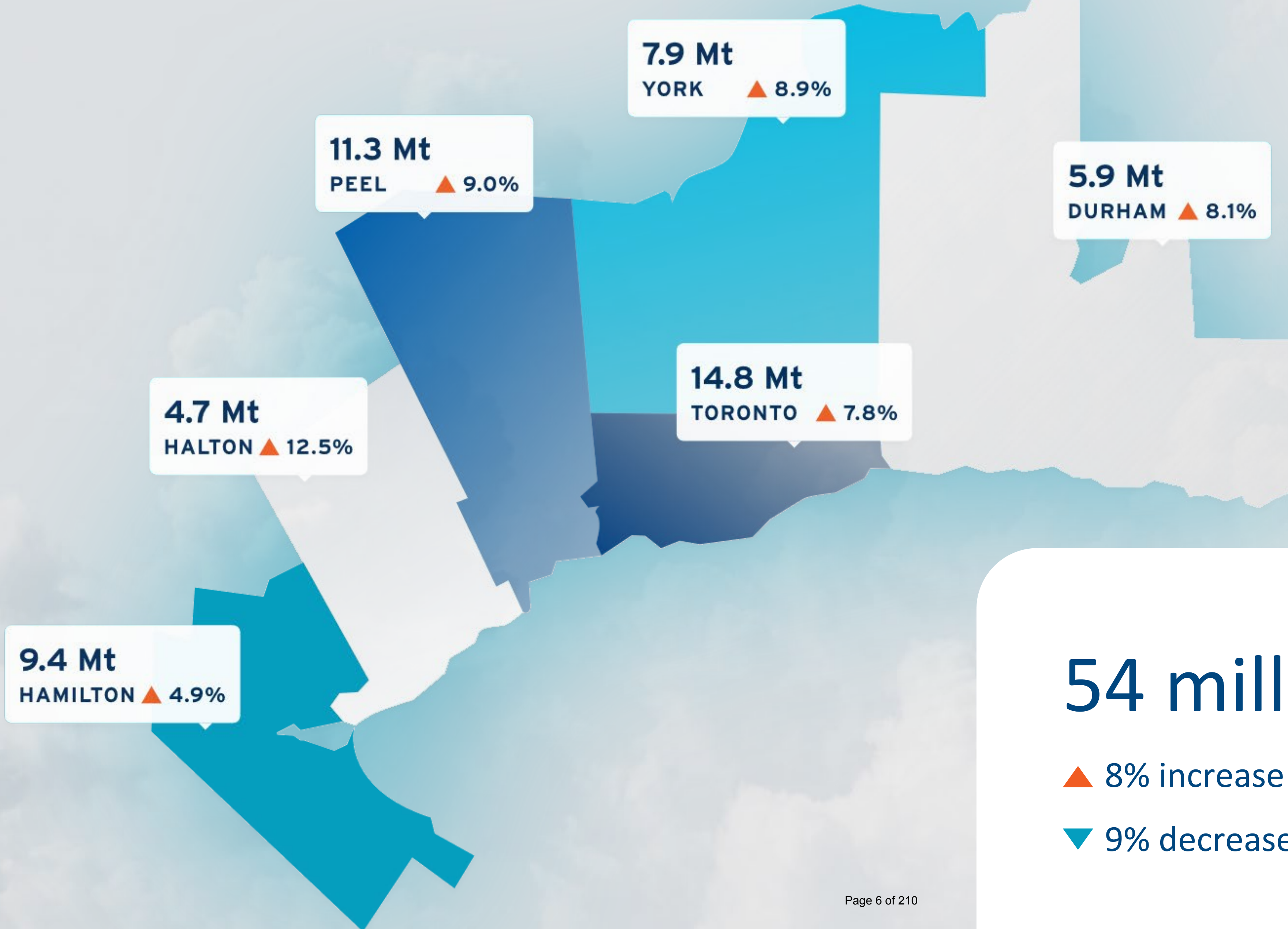
WASTE

AGRICULTURE



- Geographic scope – six regions
- Timing – one year lag
- Industrial and agriculture included
- Transportation – fuel sales
- Waste – methane commitment





**4.7 Mt**  
HALTON ▲ 12.5%

**9.4 Mt**  
HAMILTON ▲ 4.9%

**7.9 Mt**  
YORK ▲ 8.9%

**5.9 Mt**  
DURHAM ▲ 8.1%

**14.8 Mt**  
TORONTO ▲ 7.8%

**11.3 Mt**  
PEEL ▲ 9.0%

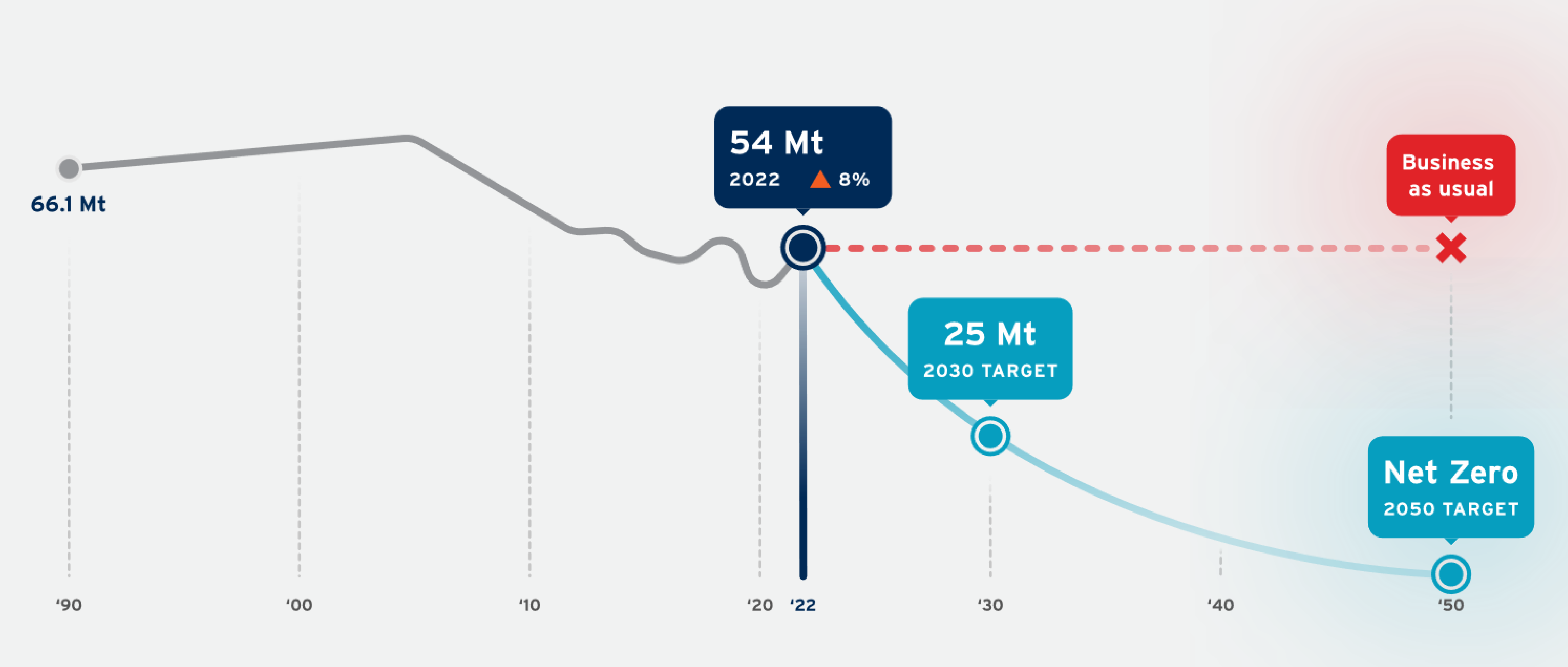
**54 million tons**

▲ 8% increase in 2022

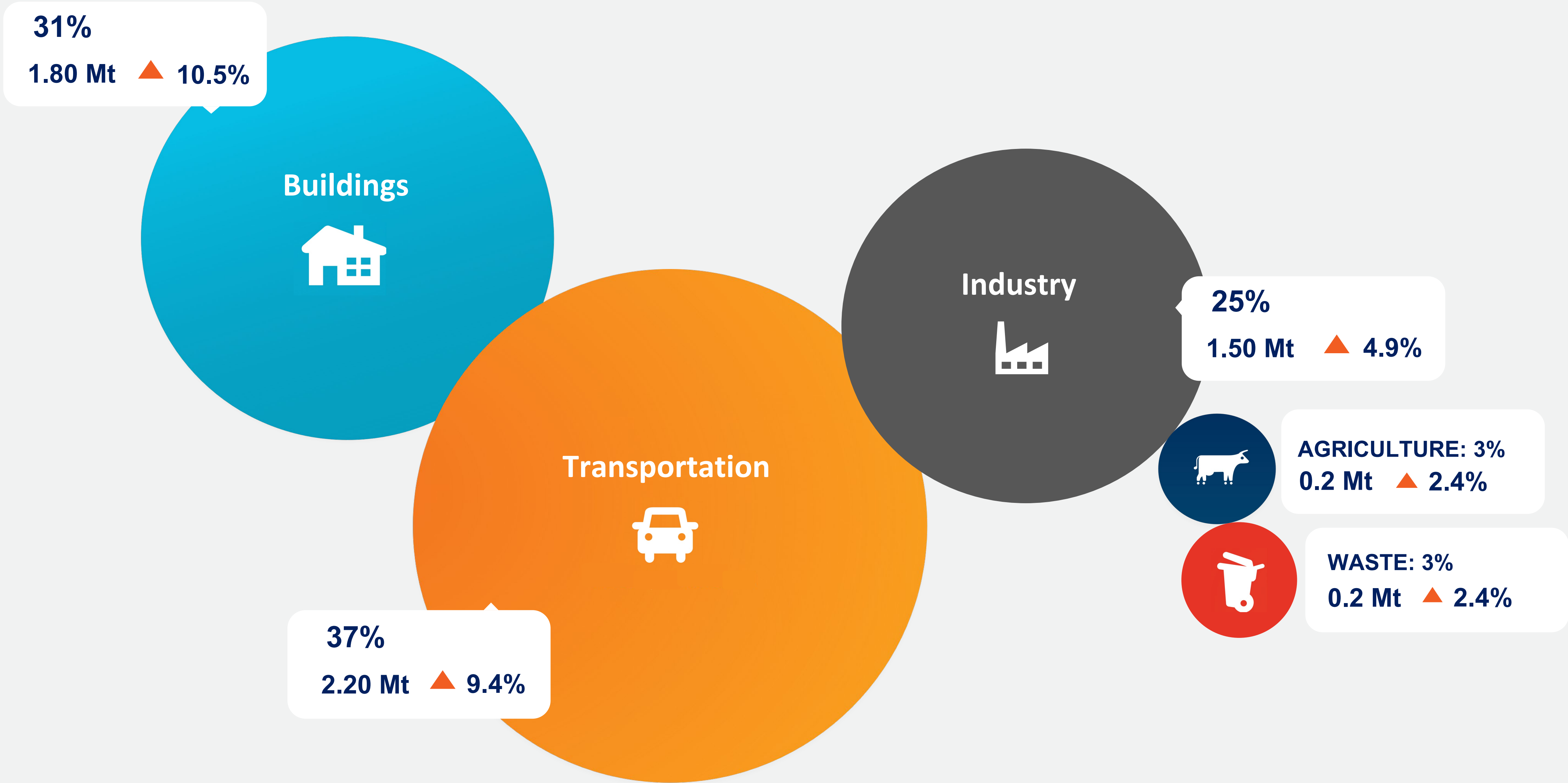
▼ 9% decrease needed



# Where we need to be

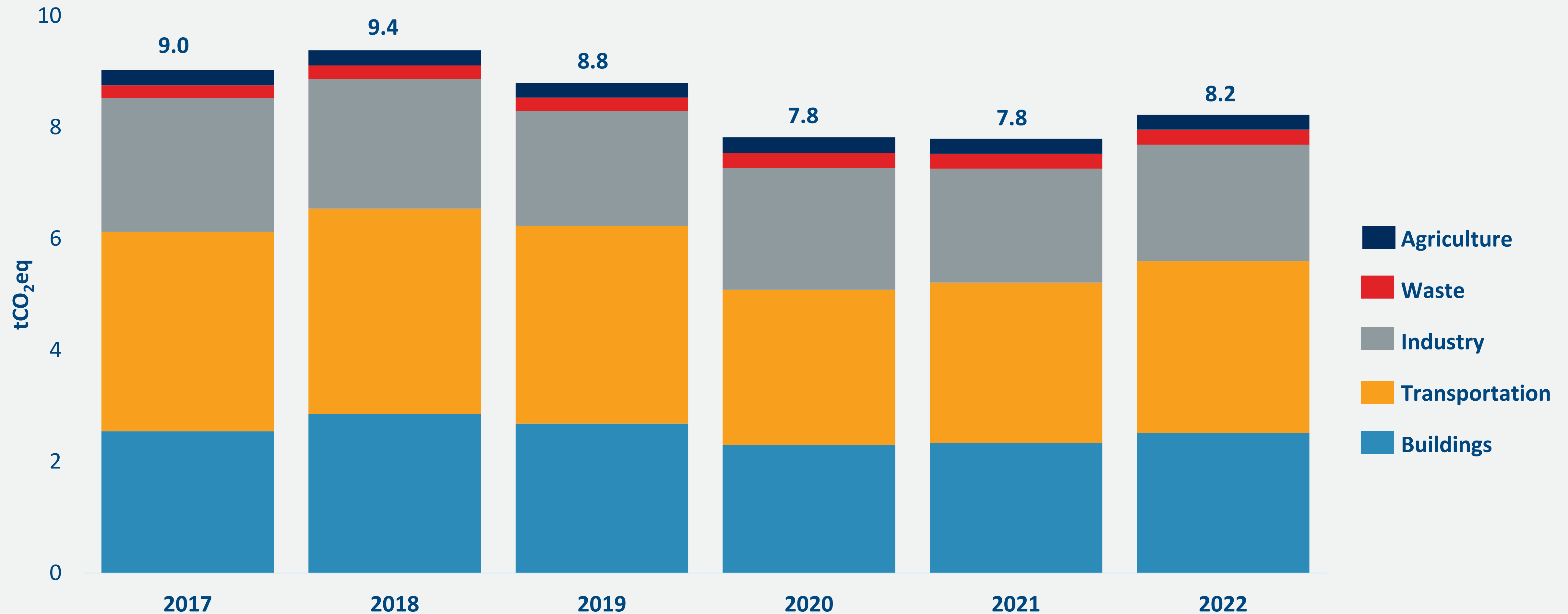








# Durham Region: Per Capita Emissions, 2017-2022



Total 2022 carbon emissions 2.2 MtCO<sub>2</sub>eq

% Change in emissions (per capita) +6.9%

% of Durham emissions 37%

# Transportation →

Photo credit: Metroland Media



# Good trends in transportation →

Photo credit: Durham.ca



Total 2022 carbon emissions	1.8 MtCO <sub>2</sub> eq
% Change in emissions (per capita)	+7.9%
% of Durham emissions	31%

Buildings →



# Electricity →

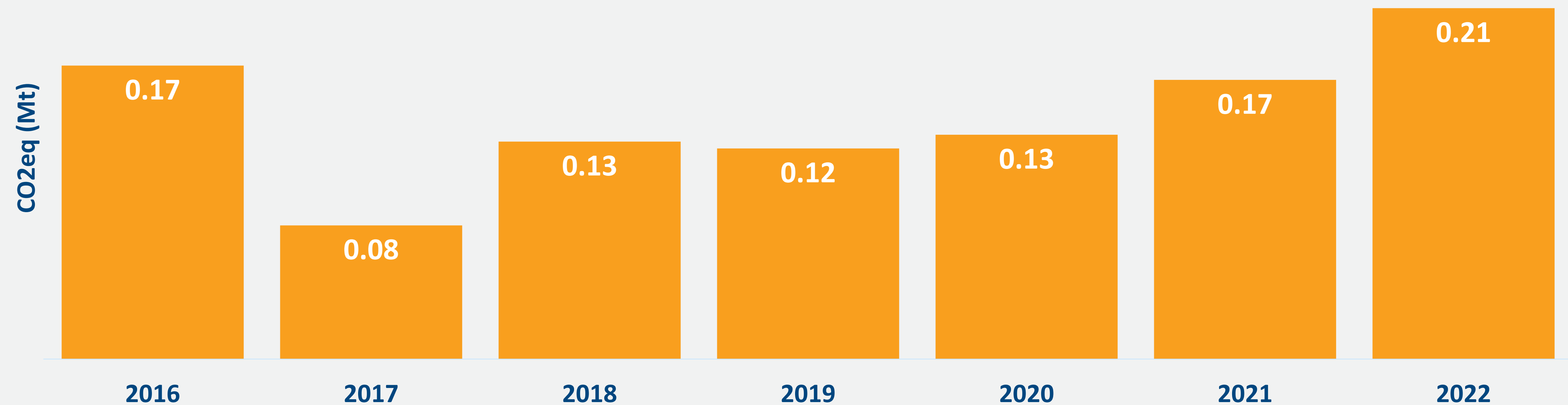
Photo credit: Oshawa.ca





## Durham Region: Electricity Emissions, 2016-2022

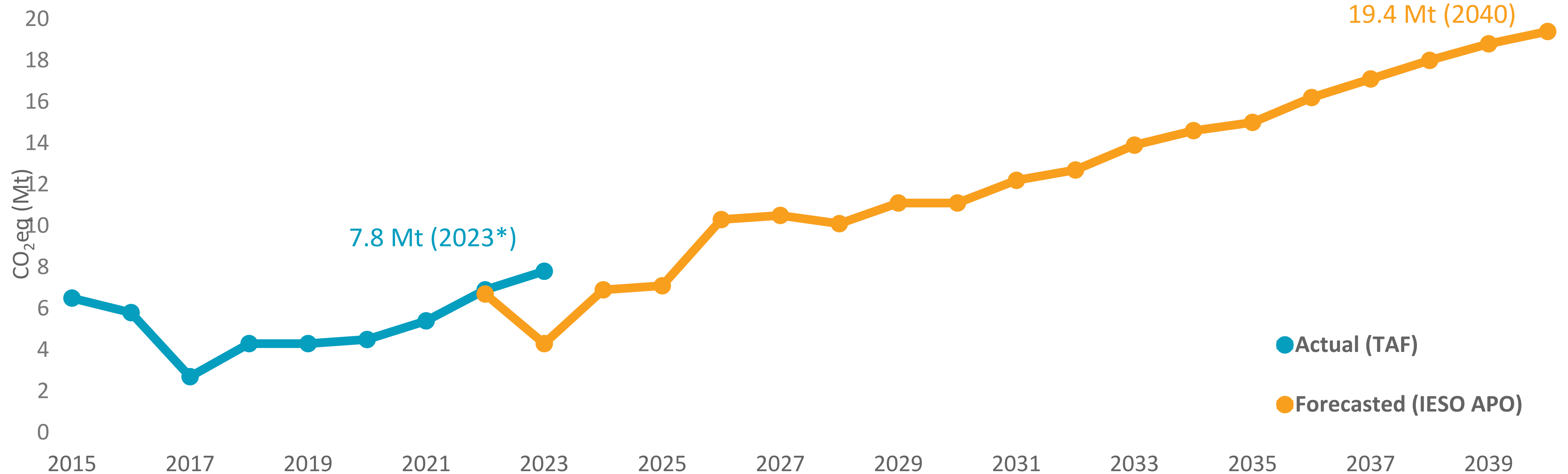
▲ 26%







## Ontario electricity emissions forecast, 2015-2040



# Municipal Climate policy priorities

## Electricity

- Streamline zoning, permitting and utility connections for distributed clean energy
- Identify and support appropriate opportunities to host large scale clean energy projects

## Buildings

- Implement, manage compliance of green development standards
- Design, implement existing building performance standards

## Transportation

- Remove or relax parking minimums and require EV ready parking in all new residential parking areas
- Invest in transit service improvements and electrification



# Connect with TAF



Bryan Purcell  
VP, Policy and Programs  
[bpurcell@taf.ca](mailto:bpurcell@taf.ca)



# BLUEPRINT FOR MORE AND BETTER HOUSING

HOW FEDERAL, PROVINCIAL AND MUNICIPAL  
GOVERNMENTS CAN ENSURE WE BUILD  
5.8M HOMES THAT ARE AFFORDABLE,  
LOW-CARBON AND RESILIENT



**Task Force for  
Housing & Climate**





# MEMBERS



LISA RAITT  
Co-chair



DON IVESON  
Co-chair



MIKE MOFFATT  
Coordinator



KIM BAIRD  
Kwantlen Polytechnic



SHEILA BOUDREAU  
SpruceLab Inc.



CHERISE BURDA  
TMU



MARK CARNEY  
Canada 2020



LEILA GHAFFARI  
Concordia University



RICHARD JOY  
Urban Land Institute



JENNIFER KEESMAAT  
Markee Developments



ADAM MONGRAIN  
Vivre en Ville



GREG MOORE  
Icona Properties



CELYESTE POWER  
Insurance Bureau  
of Canada



REN THOMAS  
Dalhousie University



TSERING YANGKI  
Dream Unlimited Corp



# Background

- **Timeline:** September 2023 - February 2024
- **Mandate:** Develop a national policy “blueprint” for how federal, provincial and municipal governments can ensure that 5.8M homes by 2030 are affordable, low-carbon and resilient
- **Process:**
  - 15 meetings over 6 months
  - 8 new research products
  - Consulted with experts and practitioners (industry, Indigenous, non-profit) and reviewed extensive body of literature and recommendations





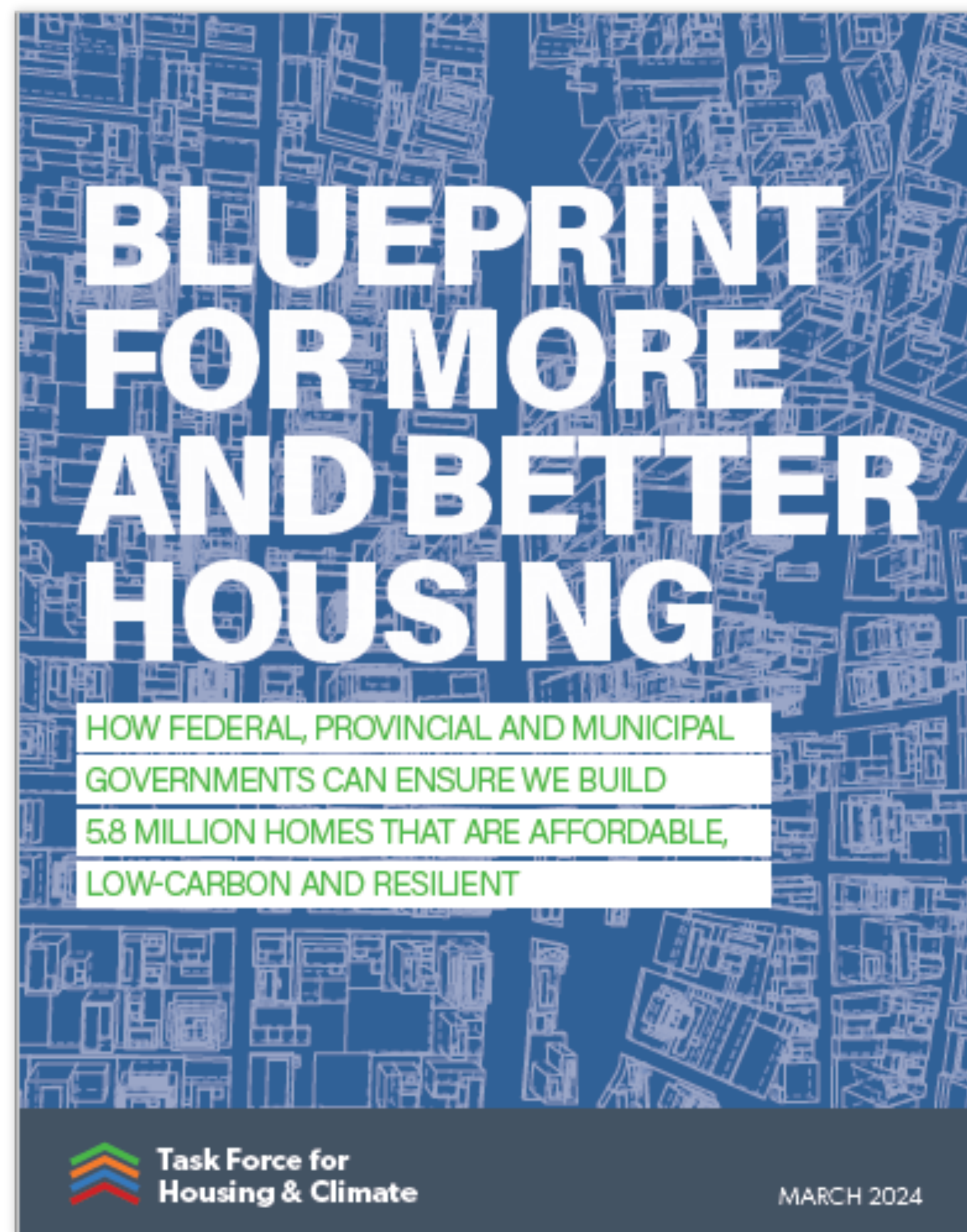
# 4 GOALS for 5.8M homes

1. MAKE IT **LOW-CARBON**: Reduce Canada's housing-related emissions to meet Canada's 2030 climate targets.
2. MAKE IT **RESILIENT**: Every home built from 2025 onward should stand up to worsening climate hazards, supporting National Adaptation Strategy goals.
3. MAKE IT **AFFORDABLE**: Cut the number of households spending more than 30% of their income on shelter costs to zero by 2031.
4. MAKE IT AT **SCALE**: Increase the scale and productivity of the homebuilding sector to build 5.8 million homes between 2022 and 2030.





# What's in the Blueprint



**10 high-level recommendations**

**140 specific policy actions**

- **50 for federal governments**
- **50 for provincial governments**
- **40 for municipal governments**

Link: <https://housingandclimate.ca/blueprint/>

# 4 Gamechangers



1. Legalize density
2. Implement better building codes
3. Invest in factory-built housing
4. Don't build in high-risk areas





# 1. Legalize density

**Building in cities and communities, where there is existing infrastructure like roads and water lines, is faster, less costly, lower carbon and more resilient.**

- **MUNICIPAL:** Eliminate unit maximums, abolish parking minimums, establish ambitious density rules near transit, streamline approval processes, allow small-scale retail in residential neighbourhoods, and unlock public land
- **PROVINCIAL:** Eliminate unit maximums, abolish parking minimums, establish ambitious density rules near transit, activate public land, create and enforce Urban Containment Boundaries where they don't already exist, and establish more permissive land use planning and override counter-effective municipal policies
- **FEDERAL:** Tie every dollar of housing, infrastructure and transit funding to provincial and municipal pro-density reforms, and unlock public land







## 2. Implement better building codes

**Building form can reduce operating costs, cut emissions, improve resilience.**

- **MUNICIPAL:** Implement highest tiers of building code through municipal standards
- **PROVINCIAL:** Adopt highest tiers of National Model Building Code, allow municipalities to exceed building code provisions for climate resilience and energy efficiency, adopt Sweden's single-egress rules, remove floorplate restrictions, and revise building codes to incorporate resilience features
- **FEDERAL:** Tie all infrastructure, transit and housing funding to provinces and municipalities adopting highest tiers of National Model Building Code, revise building codes to incorporate resilience features





## 3. Invest in factory-built housing







## 3. Invest in factory-built housing

**Factory-built housing and other innovations can speed up construction, reduce costs, and systematize energy efficient and climate resilient features.**

- **MUNICIPAL:** Foster collaboration with research institutions, tech companies and builders to accelerate innovation in housing materials and techniques.
- **PROVINCIAL:** Create an investment fund and provide guaranteed long-term government purchase orders to support industry scale-up and offset cyclical slowdowns in the housing market
- **FEDERAL:** Create an investment fund and provide guaranteed long-term government purchase orders to support industry scale-up, introduce Housing Technology Investment Tax Credit, and tax measures that unlock other innovations



## 4. Don't build in high-risk areas

**The most expensive home is the one you need to rebuild after an extreme weather event.**

- **MUNICIPAL:** Map climate hazards and invest in resilient infrastructure and planning
- **PROVINCIAL:** Map climate hazards, make climate hazard mapping publicly available, and don't allow new housing in areas at high risk of worsening impacts like wildfire and flooding without mitigation measures
- **FEDERAL:** Map climate hazards and align incentives to minimize risk



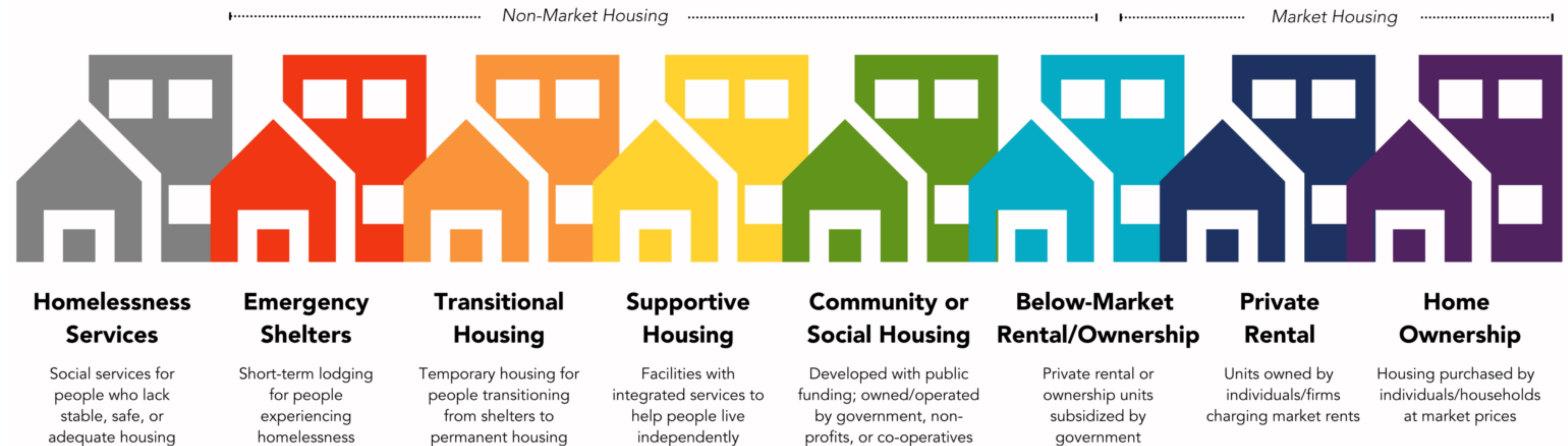


## 5. Other big ideas

- Facilitate the **acquisition and/or construction of 2.3M non-market and below-market homes** and cut the number households spending more than 30% of their income on shelter costs to zero
- Provide detailed annual **population forecasts**
- Re-balance immigration policy to cultivate and attract **skilled labour**
- Set **housing targets** for each order of government, with incentives provided for governments to exceed annual targets
- Remove barriers to and support **Indigenous-led housing** development
- And “Technocratic stuff that really makes a difference” – Mike Moffatt



# Housing Spectrum



The Task Force frequently referred to this version of the housing spectrum from the [Institute for Municipal Finance and Governance](#).





# Final thoughts

- Canada needs 5.8 million new homes by 2030 to restore housing affordability. A growing population of homeowners, renters, seniors, young families, students and precariously housed deserve a roof over their head.
- Getting it wrong will mean an unneeded **100 Mt** of annual GHG emissions in 2030 and more catastrophic losses.
- But like any constraint exercise, these conditions invite creativity and force prioritization. As the Task Force pondered all these challenges, it turns out **where** we build, **what** we build, **how** we build and **why** we build are the key questions to answer.





FUNDING PARTNERS



RESEARCH PARTNERS







# Durham Climate Roundtable Leadership Committee

**Multi-sector collaborative leadership:** Brings together relevant local government, industry and societal leadership, within Durham Region, to collaboratively work toward achieving regional climate targets

**Serves as part of a two-way information exchange network:**

- To gain expertise, share best practices and lessons learned amongst people and organizations that have demonstrated a commitment to climate leadership
- To support data gathering for the annual greenhouse-gas inventory and progress on decarbonization within Durham Region

**Champions for Change:** Recognizes the right leaders from all areas of society, will be required to lead change

**Durham Climate Roundtable Leadership Committee members are:**

1. The bridge between the Roundtable and organization
2. Strategic advisors for the annual report and action tracking
3. Ambassadors for climate action in Durham Region

## Leadership Committee Member Criteria





# **Elexicon Energy**

## **Addressing Climate and Energy Security**

**Sam Sadeghi, Vice President Asset Managent and  
Distribution Operations, Elexicon Energy**

**April 10<sup>th</sup> 2024**



# Purpose

Provide an overview of what  
Elexicon is doing to:

- Address climate change
- Plan for energy security





# Agenda

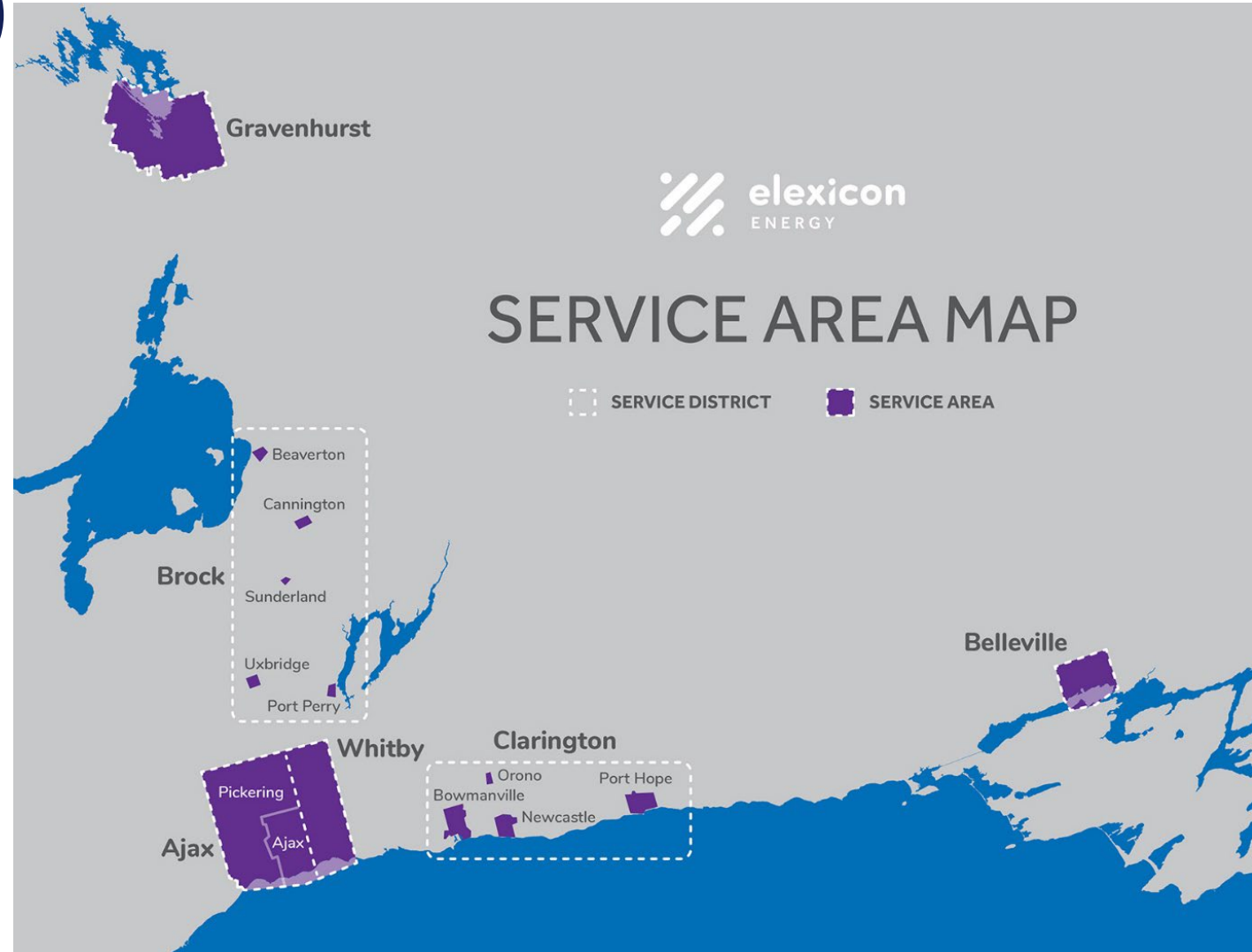
- Overview of Elexicon Energy
- Addressing Climate Change
- Energy Security Plan
- Asks of the Municipalities
- Q&A



# Overview of Elexicon

Elexicon Energy is Ontario's 4<sup>th</sup> largest municipally-owned LDC, and delivers electricity to approximately 177,000 homes and businesses located in the following ten municipalities in east central Ontario:

- Ajax
- Belleville
- Brock
- Clarington
- Gravenhurst
- Pickering
- Port Hope
- Scugog
- Uxbridge
- Whitby





# Overview of Elexicon

- Regular Full-time/Part-time Employees: 253
- Corporate headquarters located in Ajax, with offices in Belleville, Brock, Clarington, Gravenhurst and Whitby
- Approximately 4,600 km of overhead & 2,700 km of underground cable
- Approx. \$600 million in assets
- 1 Transformer Stations (TS) and 66 Municipal Stations (MS) in our service territory



# Regulatory Environment

Ellexicon Energy is regulated by the Ontario Energy Board (OEB).



The OEB:

- Licenses regulated entities (e.g. distributors).
- Approves rates of electricity distributors, transmitters and some generators.
- Sets requirements that distributors must follow (e.g. codes, guidelines, etc.)

Distribution System Code (DSC) defines requirements for connections.

- Distributors cannot reserve capacity for future developments.
- DSC defines rules for different types of system investments to enable customer growth.





## Sustainability Award

March 25, 2024

Honoured with the Sustainability  
Excellence Award from the  
Electricity Distributors Association





# Addressing Climate Change

- Environmental policy to reduce our carbon footprint
- ISO 14001 Compliance by 2025
- ESG Framework
- Enabling electrification of our customers/transit
- Forecasting load growth
- Building new substations





# Energy Security Plan

- Revised engineering and design standards
- Renewing aged assets
- Weather-hardened equipment upgrades
- Enabling bi-directional flow (microgeneration)
- New technology and grid modernization
- Cyber security



## Asks of the Municipalities

- Inform us of your critical loads and any changes to regulations
- Share load/population growth/re-zoning plans/projections
- Engage us early
- Expedited permitting (i.e. road occupancy, etc.)
- Advocacy and public education collaboration
- Patience





# Thank You!

## Questions?





# Durham Regional workshop

April 2024

Al Douglas, Paul Cobb, Alex Ho





# About CRI







## Part I - Climate Adaptation 101



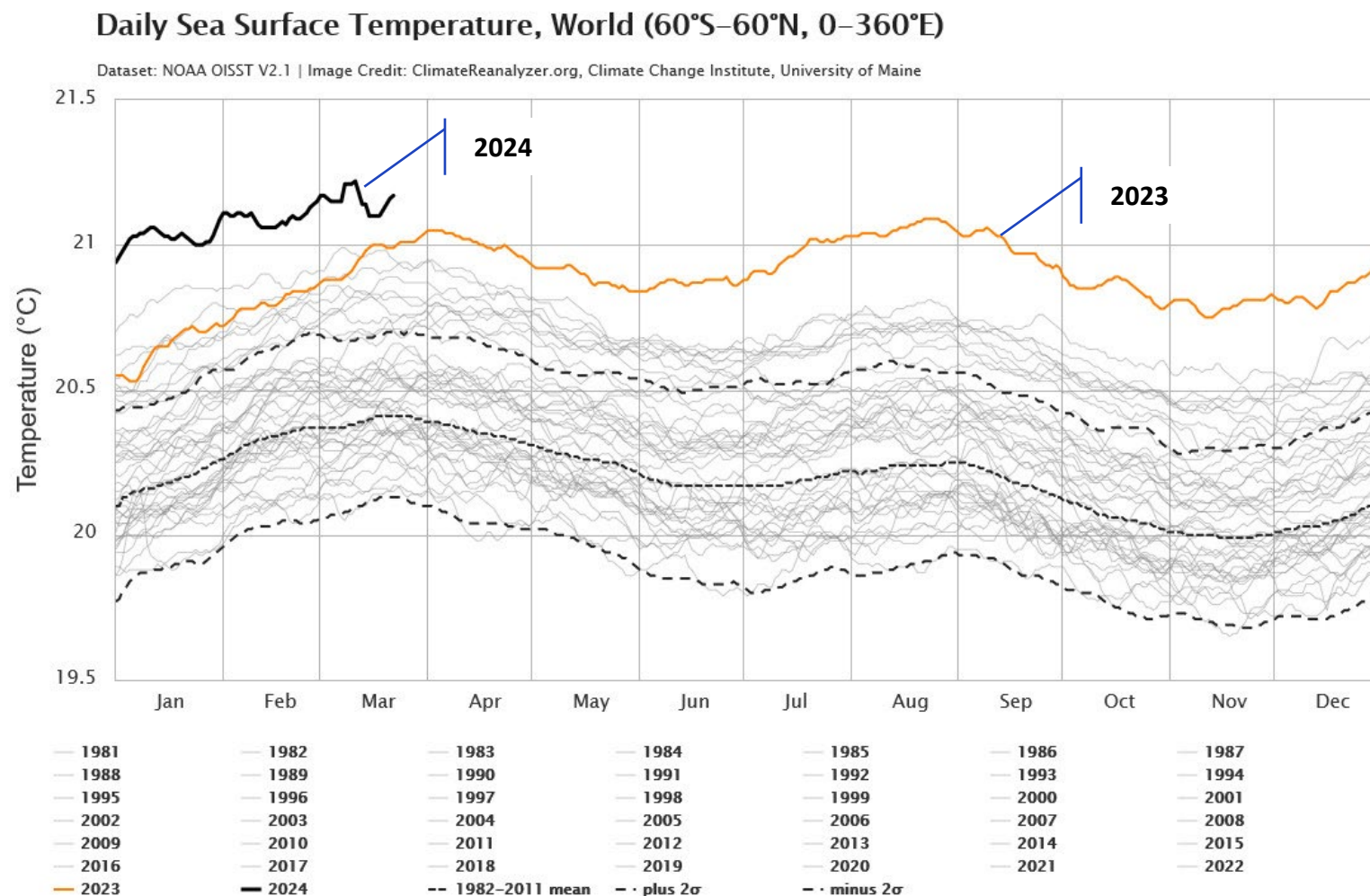
# Reflection Questions

- What are your highest priorities in the short-term for your constituents, communities and the region?
- What are your priorities for longer term social, economic, environmental well-being of the community?
- Will the impacts of **changing climate** threaten your ability to achieve those objectives or to make progress on those priorities? How?



# Climate Shift

- **Every single day** for the past 12+ months as broken previous record for global temperature.
- This winter of 2023-2024 was **5°C** warmer than historical average across Canada.
- Analysis shows majority extreme weather events made more likely, more severe by climate change.
- Increases in temperature **correspond** to increases climate impacts.





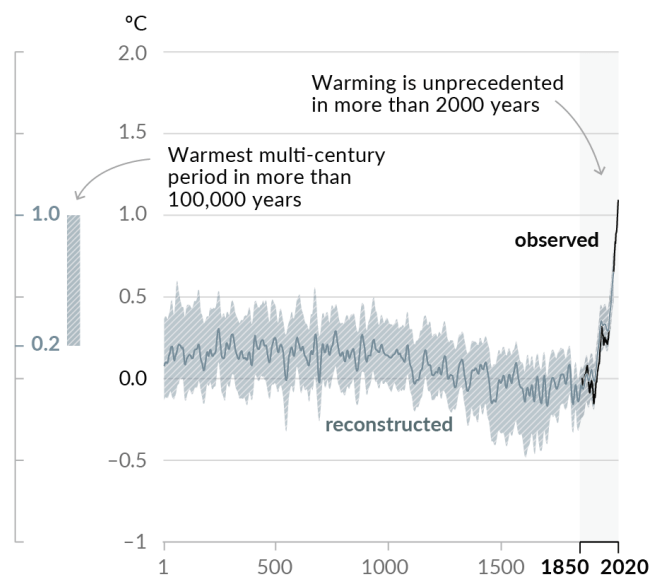
# Driving Climate Change

- Warming trends have been **observed** (measured).
- These observed changes have no precedent.
- Observed and projected changes can only be explained by human activity.

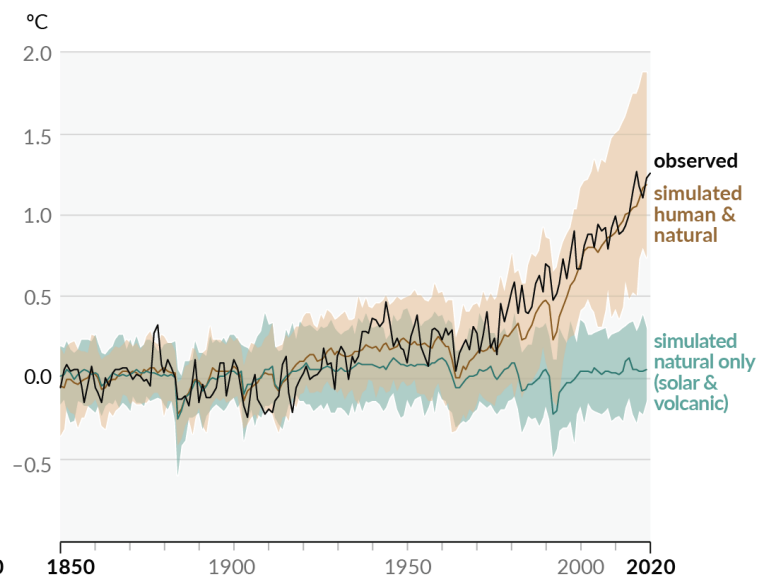
Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years

Changes in global surface temperature relative to 1850–1900

(a) Change in global surface temperature (decadal average) as **reconstructed** (1–2000) and **observed** (1850–2020)



(b) Change in global surface temperature (annual average) as **observed** and simulated using **human & natural** and **only natural** factors (both 1850–2020)



# Canada's Changing Climate Key Findings

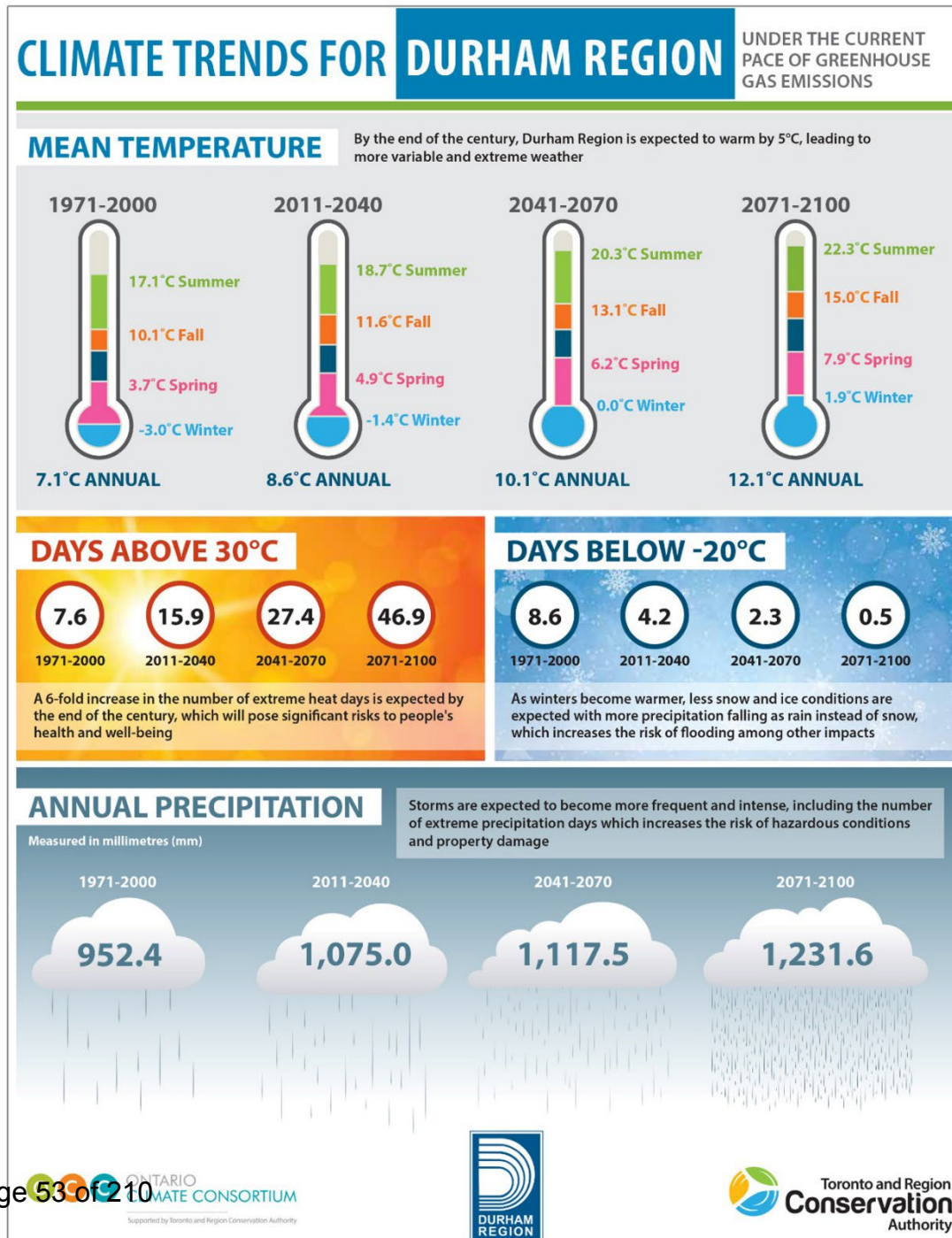


- Canada has already **warmed** and will continue to warm.
- Warming in Canada is about double the global rate
- The effects of widespread warming are evident, are projected to intensify.
- Total **precipitation** is projected to increase on average, with decrease in snowfall and increase in rain. Summer rainfalls may decrease in some areas.
- The seasonal availability of **freshwater** is changing, with an increased risk of water supply shortages in summer.
- Weather extremes are expected to intensify in the future.
- The oceans are warming, becoming more acidic, and are deoxygenating.
- The rate and magnitude of climate change under high versus low emission scenarios project **two very different futures** for Canada.



# Climate in the Durham Region: Trends and Projections

- **6-fold** increase in days above 30C by later century.
- Fewer cold days.
- Precipitation:
  - Total annual precipitation increases
  - Less snow and more rain in winter
  - Storms more frequent, more intense
  - Number of extreme precipitation events increase.



# Climate Events: Canadian Context

## Extreme heat cooked mussels, clams and other shellfish alive on beaches in Western Canada

By David Williams, CNN  
4 minute read · Updated 3:07 PM EDT, Mon July 12, 2021



"It was a catastrophe over there," he said. "There's a really extensive mussel bed that coats the shore and most of those animals had died."

### Unprecedented heat

Mussels attach themselves to rocks and other surfaces and are used to [...] generally can survive temperatures over 100 degrees for very long.

found that the heat wave "would have been virtually impossible without the influence of human-caused climate change."

It was also incredibly dangerous.

Lytton, British Columbia, broke Canada's all-time record on June 30 when the temperature topped 121 degrees. The town was all but destroyed in a deadly wildfire.

There were 719 deaths reported to the province's coroners between June 25 and July 1 – three times as many as would normally occur during that time period, according to a statement from Lisa Lapointe, British Columbia's chief coroner. Hundreds of people died in the US and many had to be hospitalized because of the heat.

## Canadian wildfire smoke spreads hazardous haze through northeastern U.S.

[Peltz, J. & Gillies, R. \(2023\), via LA Times.](#)



Flooding in Southern Alberta, 2013  
[Thompson, J. \(2013\) via Canadian Geographic](#)



## How climate change fits into Calgary's record flood

JUN 23, 2013 | 595 WORDS | 3 MINUTES

BY JIMMY THOMSON



## Fiona reshaped P.E.I.'s coastlines, stoking fears for the Island's future

Federal minister says these atmospheric events are directly linked to climate change

[Goodsell, D. \(2023\), via CBC](#)  
[The Coastline Initiative, 2023 \(via CBC\);](#)  
[Hennessey, S. \(2023\) \(via CBC\)](#)



Extreme heatwaves in British Columbia, Summer 2021  
[\(Williams, D. \(2021\), via CNN\)](#)

Images: Jacobson, J. / Associated Press (2023);  
[Canadian Forces/CPL Marc-Andre Leclerc/Canadian Forces via Reuters](#) via ABC News



# Climate Events – Durham Region Impacts

**NEWS**

## 'High levels of air pollution': Durham air to be affected by wildfire smoke

Durham Region is going to be affected for the next several days by smoke from the wildfires in northern Ontario and Quebec

**AJAX**  
**News Advertiser.** By Ajax News Advertiser  
Tuesday, June 27, 2023 | 1 min to read

[DurhamRegion.com, 2023](https://durhamregion.com)

The air quality in Durham Region will be affected for the next several days by smoke from the wildfires in northern Ontario and Quebec.

Air Quality Ontario (AQO) issued a statement, noting, "High levels develop tonight (Tuesday, June 27) due to smoke from forest fires.

"Smoke plumes from forest fires over northeastern Ontario and Quebec into the area overnight tonight, resulting in deteriorated air quality improve for some areas Friday," the agency added.

The agency noted that the smoke will cover an area from Kingston to Niagara area.

"Air quality and visibility due to wildfire smoke can fluctuate over the day and can vary considerably from hour to hour," it said.

The AQO said the wildfire smoke can be harmful to everyone's health, especially those with pre-existing conditions, and people should take action to reduce their exposure. "People with lung disease (such as asthma) or heart disease, older adults, pregnant people, and people who work outdoors are at higher risk of health effects caused by wildfire smoke. Speak with your health care provider about developing a management plan for wildfire smoke events, maintaining necessary medications at home, and always carrying these medications during wildfire season," the agency noted.

Anyone engaged in activity should stop or reduce what they are doing if breathing becomes uncomfortable, the AQO added.

**TORONTO | News**

## Heat wave moving through southern Ontario

A heat warning is now in effect for Toronto and parts of the Greater Toronto Area, as the air quality in the region deteriorates.

At around 2 p.m., [Environment Canada said a two-day heat wave will start Thursday](#), with daytime temperatures expected to be near 30 C today through Friday.

The heat warning impacts southern parts of the province – including Hamilton, Vaughan, Pickering, Halton and Peel regions – and most of northeastern Ontario.

On Wednesday morning, at around 10:15 a.m., [Environment Canada issued a special air quality statement, saying the air quality could pose a moderate risk](#) to people in the area with the [potential of increasing to high risk](#) later in the day. Just before 10 p.m., the air quality statement ended.

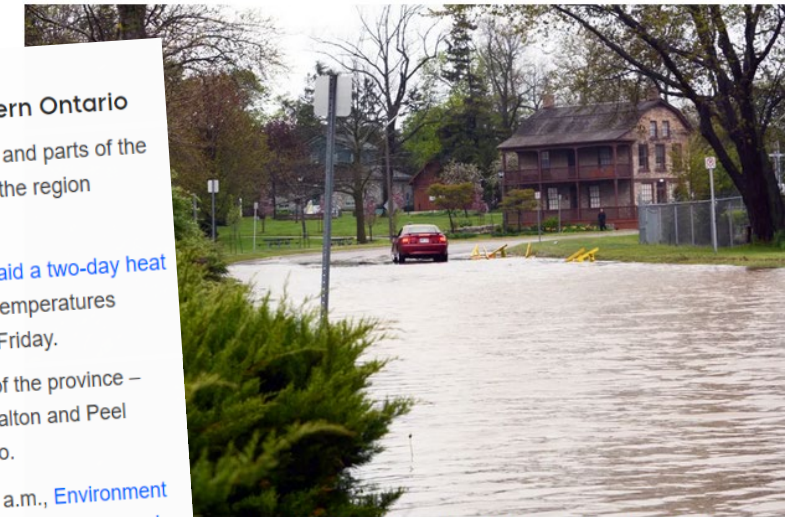
The federal agency says the "hot and humid weather conditions" can lead to elevated levels of air pollution.

The statement is in effect for Toronto, Mississauga, Brampton, Vaughan, Richmond Hill, Markham, Halton Hills, Milton, Burlington, Oakville, Pickering, Oshawa, Newmarket, Georgina, southern Durham Region and northern York.

## Flooding continues across Durham

**CLOCA warns to avoid bluff areas as erosion continues**

Posted on May 31, 2017 by oshawaexpress in NEWS



Beach South at Lakeview Park were closed, including the beach parking lot as water levels rose. The high water levels are causing flooding and erosion across Durham Region, putting at risk to cause safety concerns along the lake's bluffs. (Photos by Joel)

Oshawa Express

**NEWS**

## Environment Canada puts Ajax and Pickering as well as Oshawa and Whitby under special weather statement Jan. 25-26 warning of 'hazardous' conditions for residents

Drivers and pedestrians being put on alert

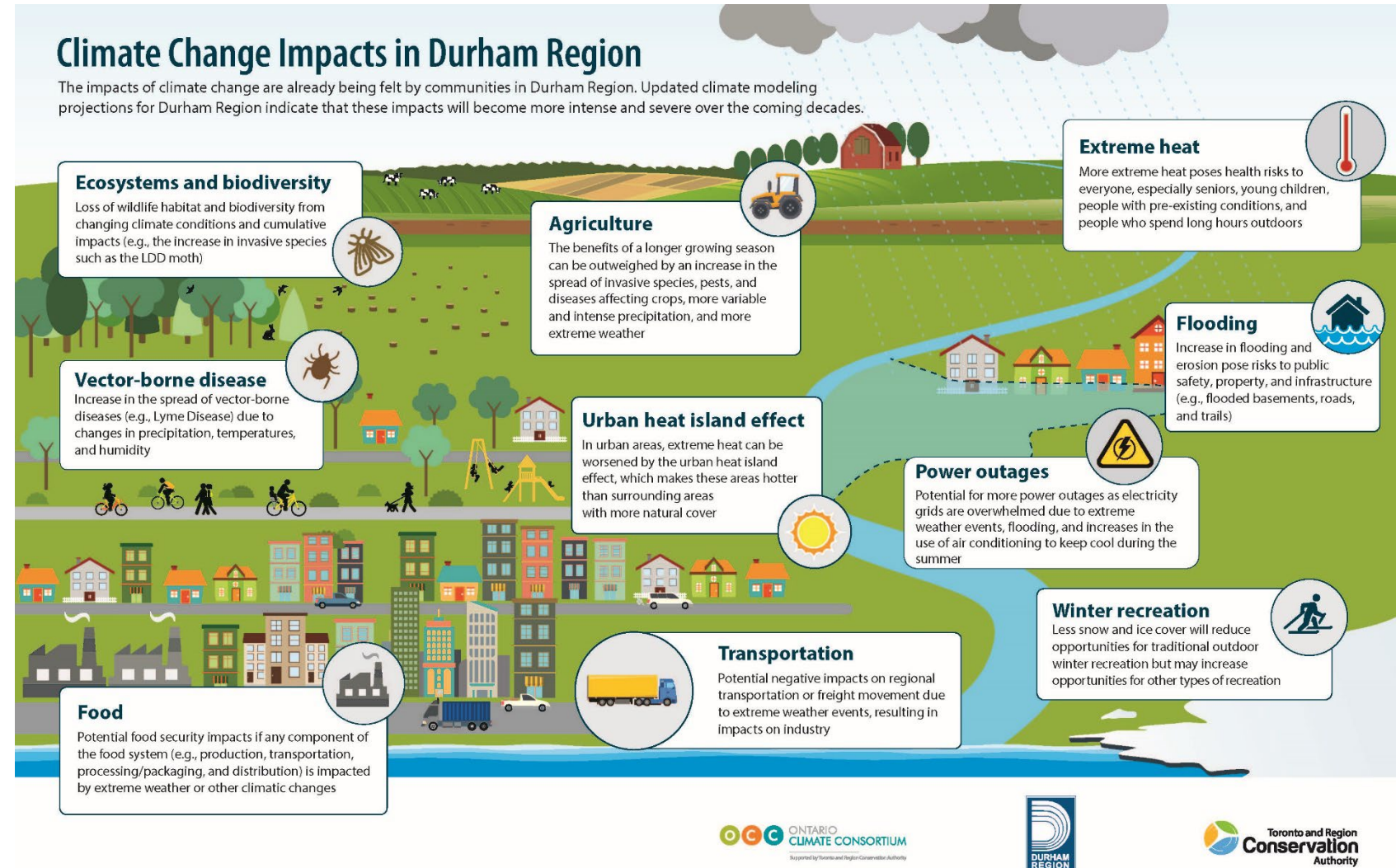


By [Louie Rosella](#) Durhamregion.com

Thursday, January 25, 2024 | 1 min to read

# Climate Impacts in Durham Region

- **Documented** impacts throughout the Durham region have been observed and reported and summarized.
- **Including:** Agriculture, Heat, Food Security, Recreation, Flooding, Biodiversity.





# Increasing Flood Risk

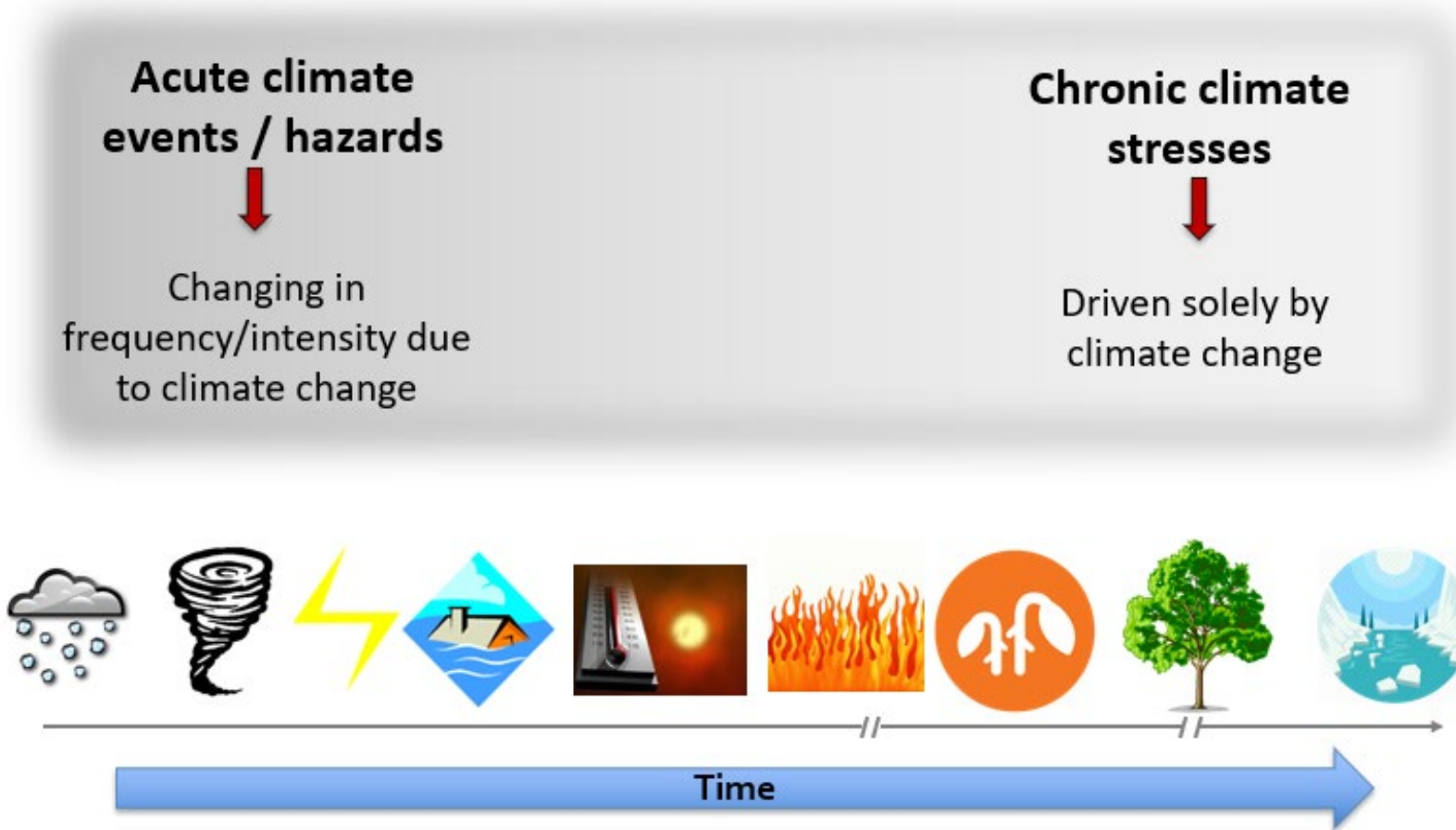
Floods are the costliest type of natural disaster in Canada. Severity and frequency have both increased due to:

- More long-duration heavy precipitation events
- More short-duration intense storms
- Shifting spring snowmelt regimes
- Increasing rain-on-snow events
- Sea level rise
- Changes in coastal dynamics e.g. storm surge, extreme high-water-level events, waves, high tide

## Predominant and secondary flooding hazards in Canada



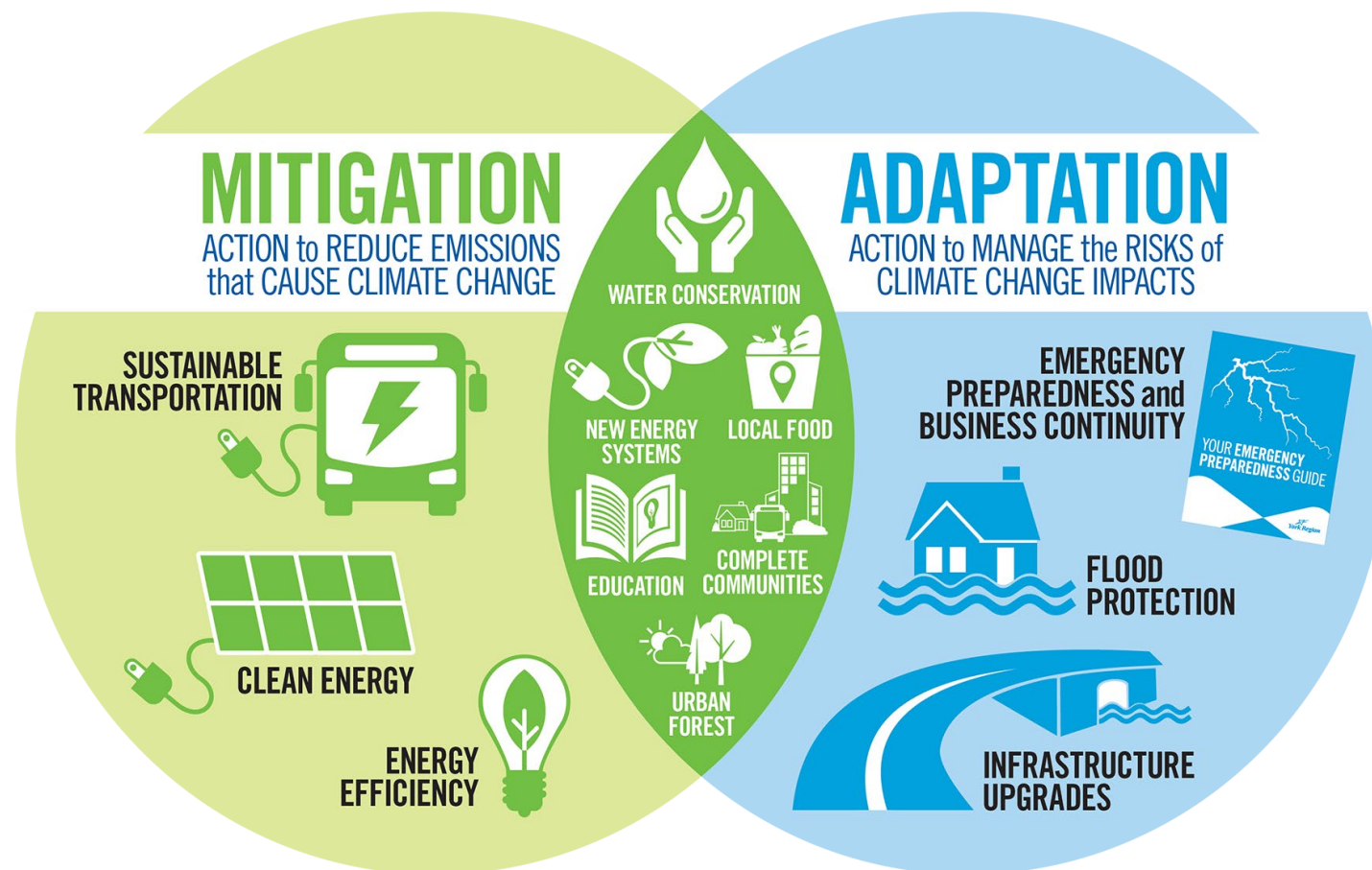
# Acute vs Chronic Climate Impacts





# Responses to climate crisis

“Adaptation measures reduce risks from climate impacts but efforts will be **overwhelmed** by increasingly extreme weather events unless combined with **aggressive mitigation efforts** to curb global warming.” - IPCC

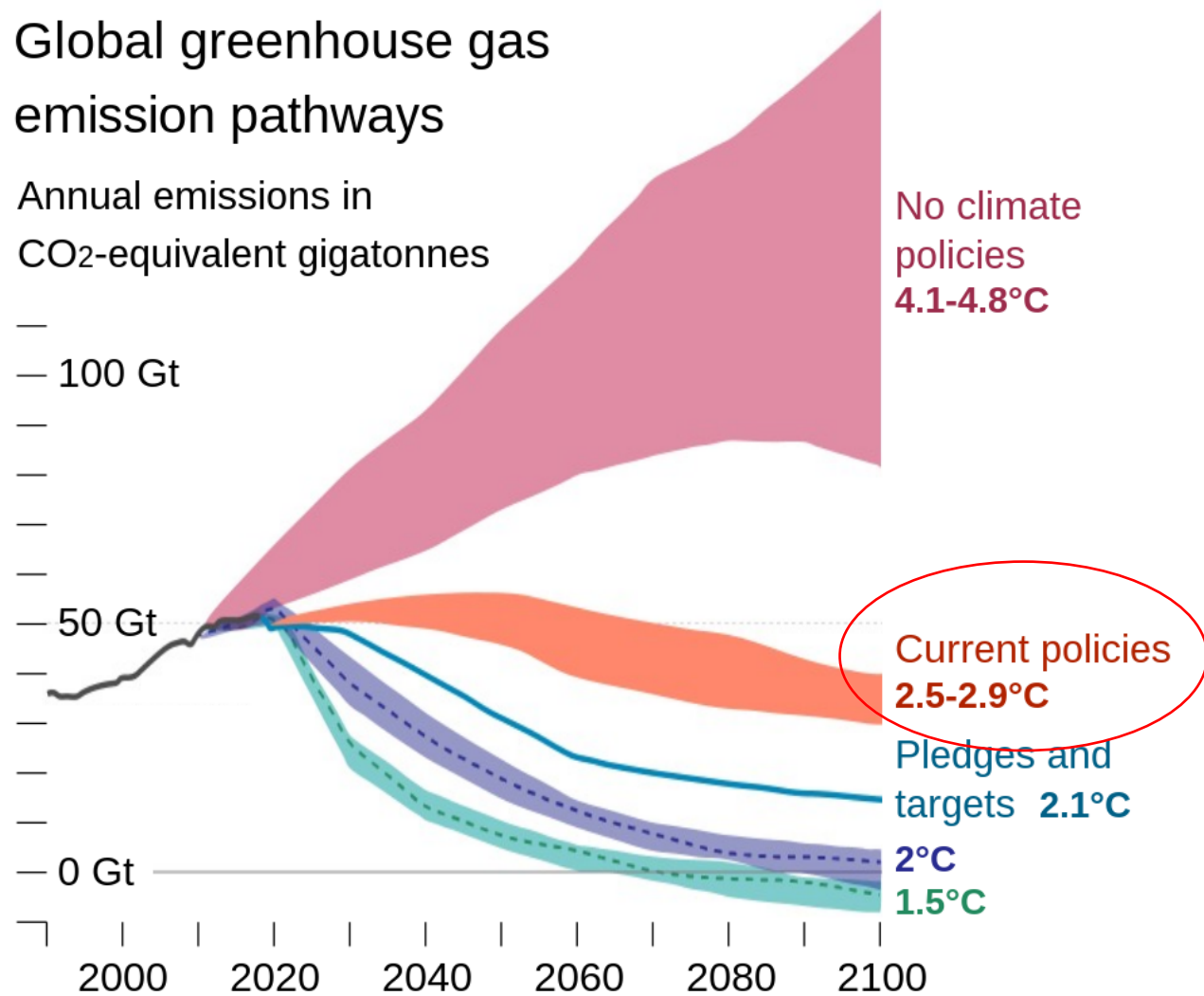


Source: York Region (2022)

# Where Are We? Where Are We Going?

## Global greenhouse gas emission pathways

Annual emissions in CO<sub>2</sub>-equivalent gigatonnes



- Global temperatures have already increased by 1.3°C.
- With **current policies** global temperatures will increase by 2.7°C by end of century.
- → Some **progress** compared to where we were 10-15 years ago
- However, we are experiencing significant impacts already – at “only” 1.3°C warming.
- Climate hazards and risks are **amplified** with each tenth of a degree warming.
- Adaptation is recognizing and preparing for these impacts.

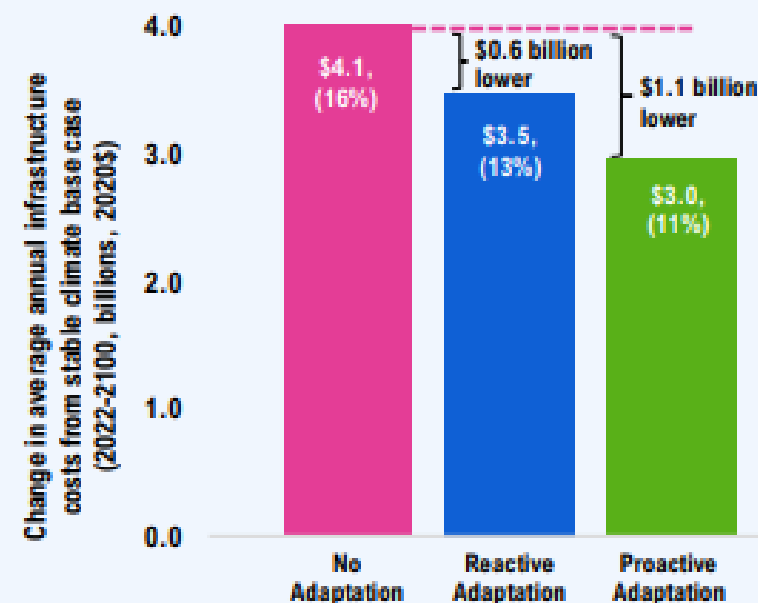


# Financial Benefits of Adaptation

- Climate change will increase public infrastructure costs – risk assessment and adaptation can provide financial value to municipal and regional governments.
- **Proactive adaptation efforts** – reduces risk of infrastructure damage and service disruption at the lowest cost.
- Municipalities will incur **4x greater** climate costs to infrastructure than the province will.

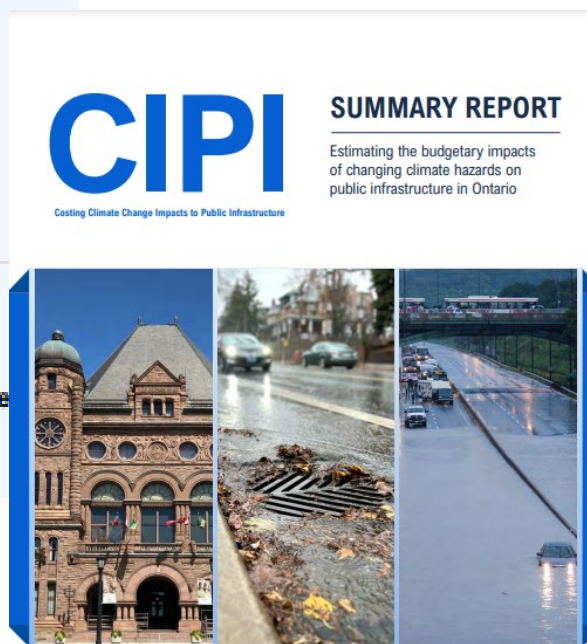
Figure 1-2

## Adaptation can lower infrastructure costs



Note: Values represent the median projection of the medium emissions scenario. Uncertainty bands are omitted from this figure for clarity of presentation (see [Accounting for uncertainty](#)).  
Source: FAO.

Source:  
Financial  
Accountability  
Office of  
Ontario (FAO),  
2023



# More Evidence of Cost-Benefit?

Investing \$1 in prevention results in avoided costs of...

**\$4**

from  
investments in  
improved  
resilience

**Source:** [Global  
Commission on  
Adaptation](#)

**\$5**

from  
governments'  
climate  
resilience  
investments

**Source:** [The  
Economist](#)

**\$6**

from hazard  
mitigation  
investments

**Source:** [US  
National Institute  
of Building  
Sciences](#)

**\$6**

from disaster  
mitigation  
investments

**Source:** [Federation of  
Canadian  
Municipalities](#)

**\$13-15**

from  
economy-wide  
direct and  
indirect  
benefits

**Source:** [Damage  
Control;  
Canadian  
Climate  
Institute](#)

**\$40**

related to the  
(prevented!) 1997  
Winnipeg flood  
alone

**Source:** [Government of  
Manitoba](#)



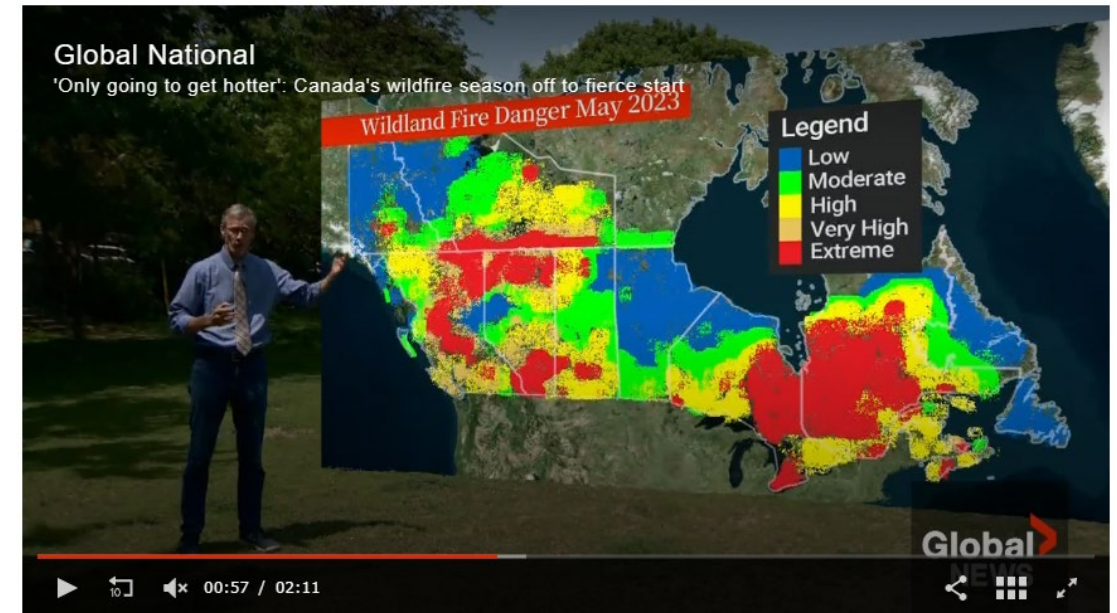
# Climate Change and Cost Of Living

- "Climate-related **damages increase the average household's cost of living by \$700 each year** - in the form of higher grocery bills due to supply-chain disruptions, to rising home insurance premiums and tax hikes to pay for disaster recovery and infrastructure repairs."
- Climate damage to production and disruption to supply chain "very significant" impact on **food prices** already; "heatflation" could add another 3% per year to currently over next decade.
- Home **insurance costs** rising as insurance companies respond to increase in catastrophic events.
- Overall, climate damages slowing economic growth and costing jobs.

## Insurance costs rising as 'catastrophic events' become the norm

By Rosa Saba • The Canadian Press

Posted June 2, 2023 11:45 am • Updated June 2, 2023 2:18 pm • 4 min read



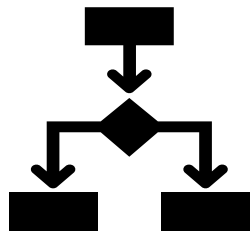
WATCH ABOVE: 'Only going to get hotter': Canada's wildfire season off to fierce start – May 31, 2023

# What Can 'Adapting' Look Like?

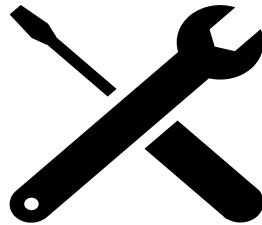
- Climate change has impacts and interdependencies between systems, including infrastructure systems.
- Variety of adaptation types
- Adaptation solutions can be diverse and overlapping



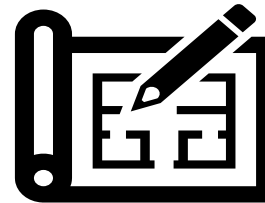
**Policy**



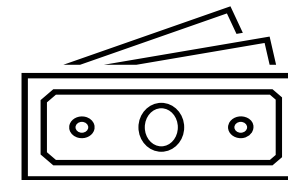
**Procedures**



**Physical  
Interventions**



**Planning**



**Financial  
Mechanisms**



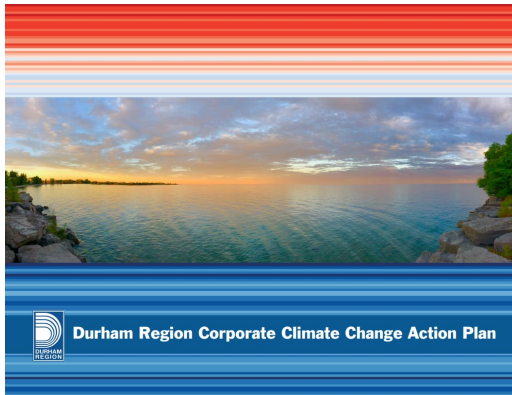
**Additional  
Monitoring**



# Adaptation and Resilience Initiatives in Durham Region



*Flood Ready  
Durham*



*Durham Region  
Corporate Climate  
Change Action Plan*

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3803



The Regional Municipality of Durham  
Report

To: Finance and Administration Committee  
From: Chief Administrative Officer  
Report: #2020-A-14  
Date: June 3, 2020

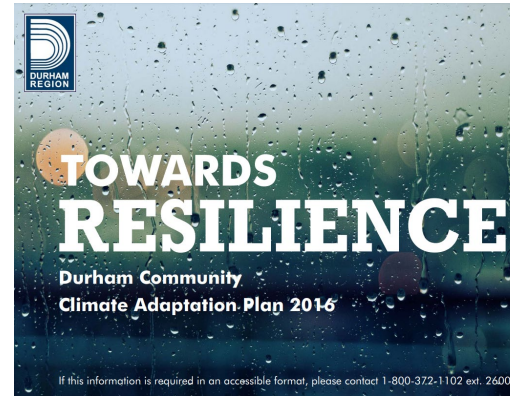
Subject:  
Climate Mitigation and Environmental Initiatives Reserve Fund Investment Plan

#### Recommendations:

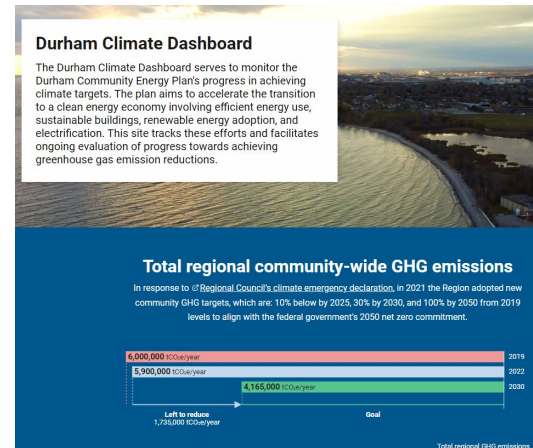
- A) That Regional Council approve general allocations in the total amount of \$5.0 million from the Climate Mitigation and Environmental Initiatives Reserve Fund to the priority project categories outlined as follows:
  - i) High-performance new buildings (Regional portfolio) - \$1.5 million
  - ii) Deep energy retrofits of existing buildings (Regional portfolio) - \$2.5 million
  - iii) Deep energy retrofits of existing buildings (Community-wide) - \$350,000
  - iv) Region-wide nature-based climate solutions - \$500,000
  - v) Adaptation vulnerability and risk assessments - \$150,000
- B) That Chief Administrative Officer and Commissioner of Finance be authorized to determine specific project funding allocations within the recommended allocation of \$5.0 million using the outcome-based principles described in this report.

Project	Estimated Investment (\$M)
High performance new buildings (Regional Portfolio) – incremental additional investment to meet net zero energy performance in new corporate facilities	\$1,500,000
Deep energy retrofits of existing corporate facilities (Regional Portfolio) – rooftop solar, energy audits, social housing retrofits	\$2,500,000
Deep energy retrofits of existing community buildings (Community-wide) – launch of Durham Home Energy Savings Program	\$350,000
Region-wide nature-based climate solutions program – enhance tree planting and stewardship programs in partnership with Conservation Authorities and non-profit partners (e.g. Forests Ontario, Highway of Heroes Tree Campaign)	\$500,000
Adaptation studies – urban flood risk vulnerability assessment and public health climate vulnerability assessment	\$150,000
<b>Total Projects Budget</b>	<b>\$5,000,000</b>

*Climate Mitigation and  
Environmental Initiatives Reserve  
Fund Investment Plan  
(\$500,000 for adaptation and  
vulnerability assessments)*



*Community  
Adaptation Plan 2016*



*Durham Climate  
Dashboard*

Page 6 of 10

## AJAX WATERFRONT EROSION MITIGATION PROJECT

HOME » CONSERVATION » EROSION RISK MANAGEMENT » ACTIVE PROJECTS » AJAX  
WATERFRONT EROSION MITIGATION PROJECT

SHARE: [f](#) [t](#)

Toronto and Region Conservation Authority (TRCA), in partnership with the Town of Ajax, is undertaking a flood and erosion control project along the Ajax Waterfront.



Aerial view of the Ajax Waterfront. Source: TRCA, 2021

*TCRA – Ajax  
Waterfront  
Erosion Control*

## BRILLIANT ENERGY INSTITUTE at Ontario Tech

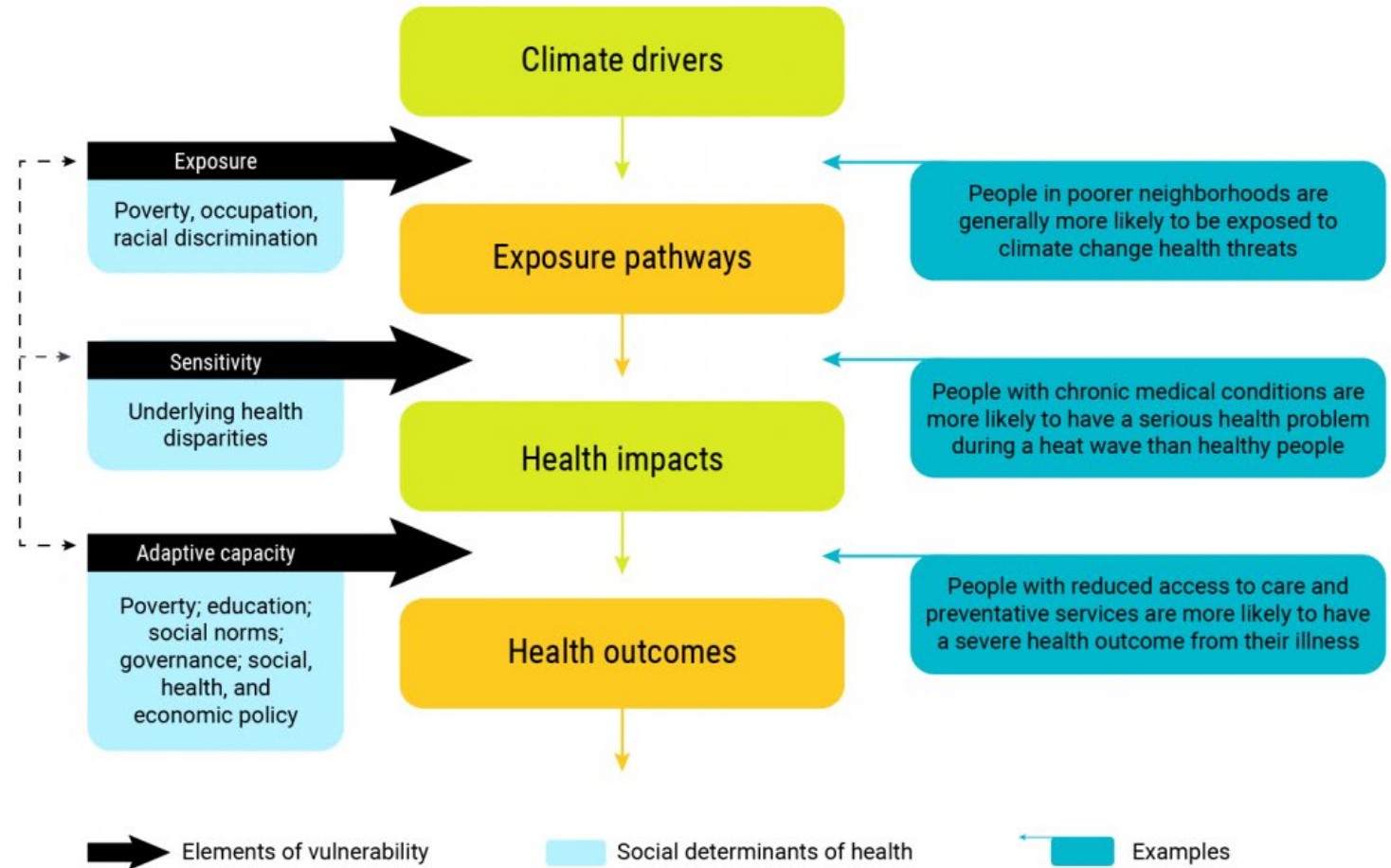
Durham Climate  
Roundtable

Durham Climate Roundtable is a leadership body of public and private-sector representatives working together to strengthen climate action in a collective effort to decarbonize to net zero by 2050.

*Durham Climate  
Roundtable*

# Adaptation Addresses Equity

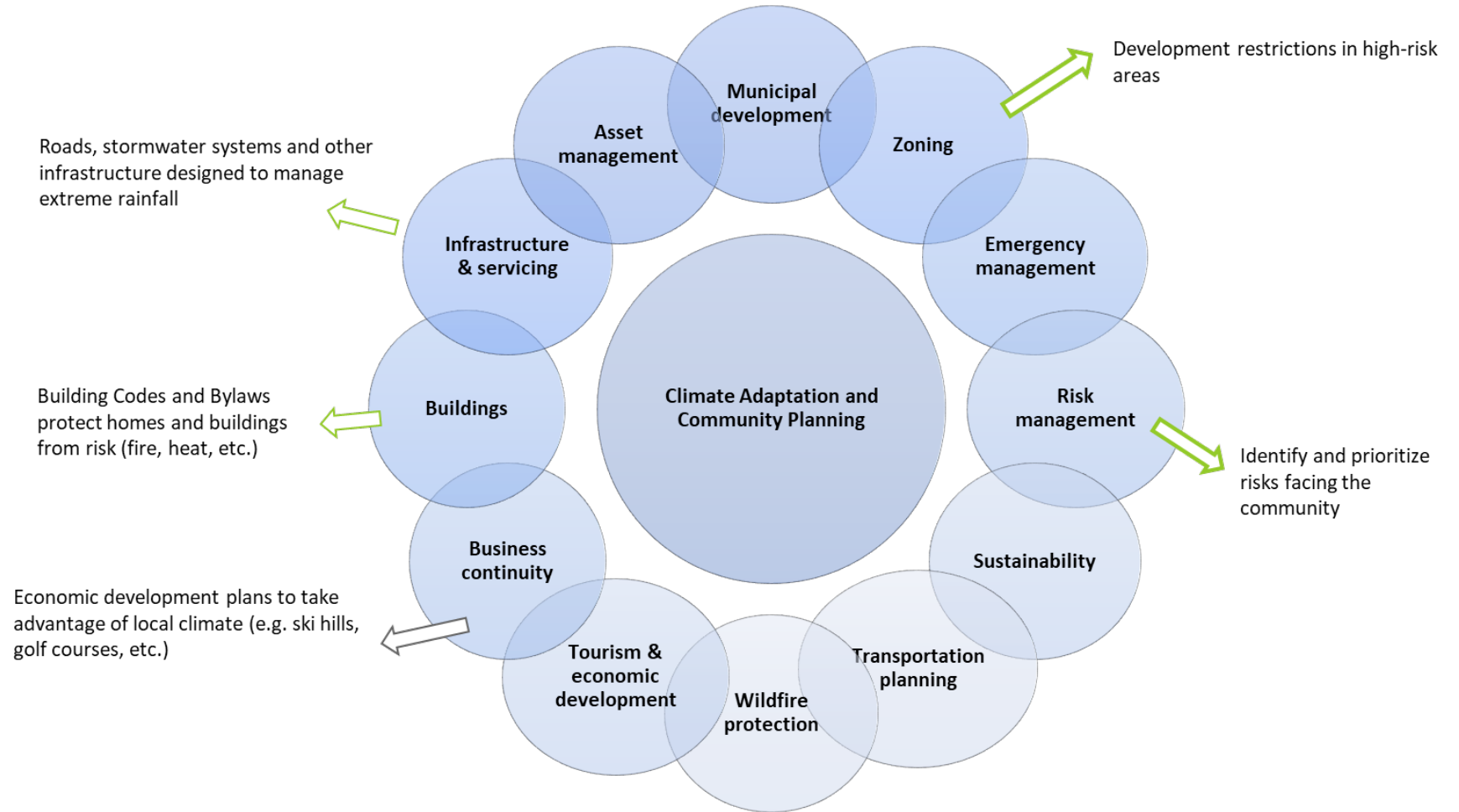
- Addressing environmental, social and economic factors essential for increasing resilience – for all types of impacts and climate hazards.
- Apply equity lens to risk assessment and adaptation design.
- **Example (figure):** Health, equity and justice interact with climate, influencing health outcomes within a community.





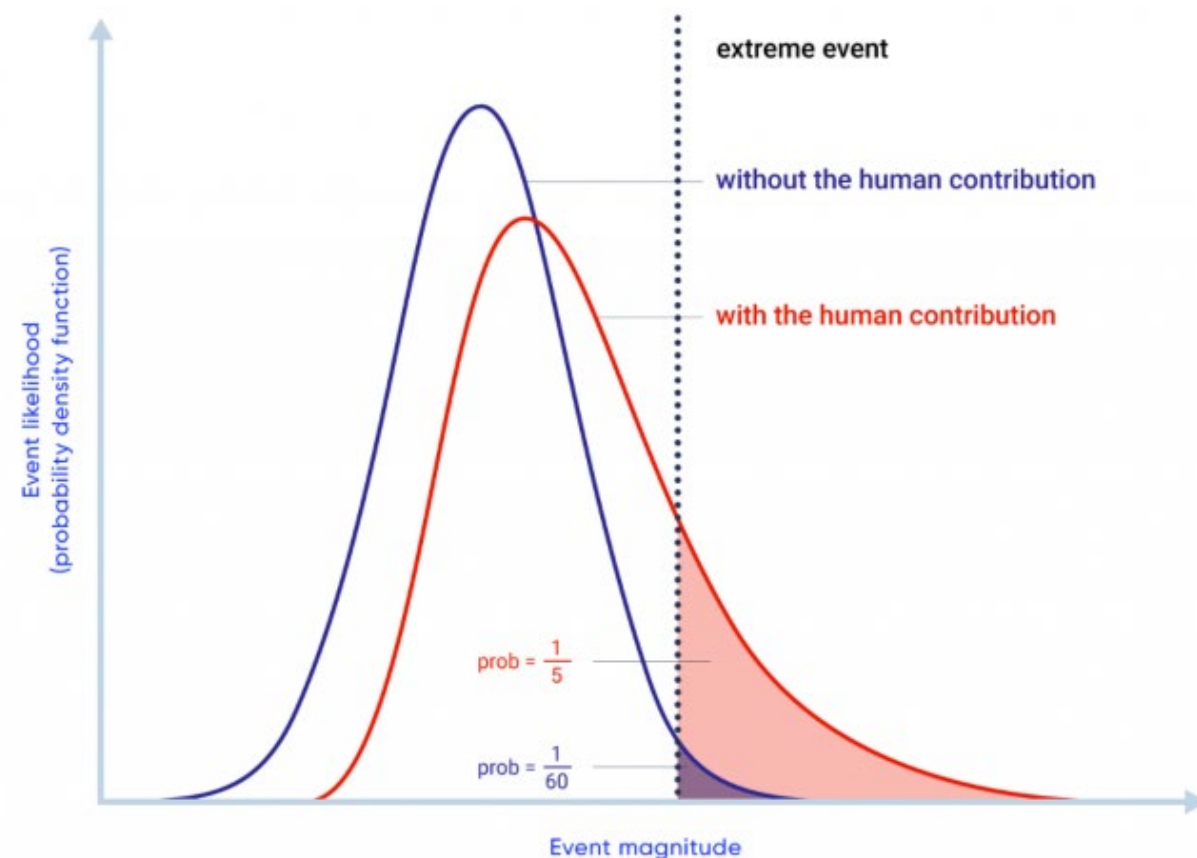
# How Climate Intersects With Local Issues

- Adaptation to climate change can be coordinated through municipal or regional adaptation or climate plans.
- *However*, need to engage across all departments for buy-in and implementation.



# Changing Mean → Changing Extremes

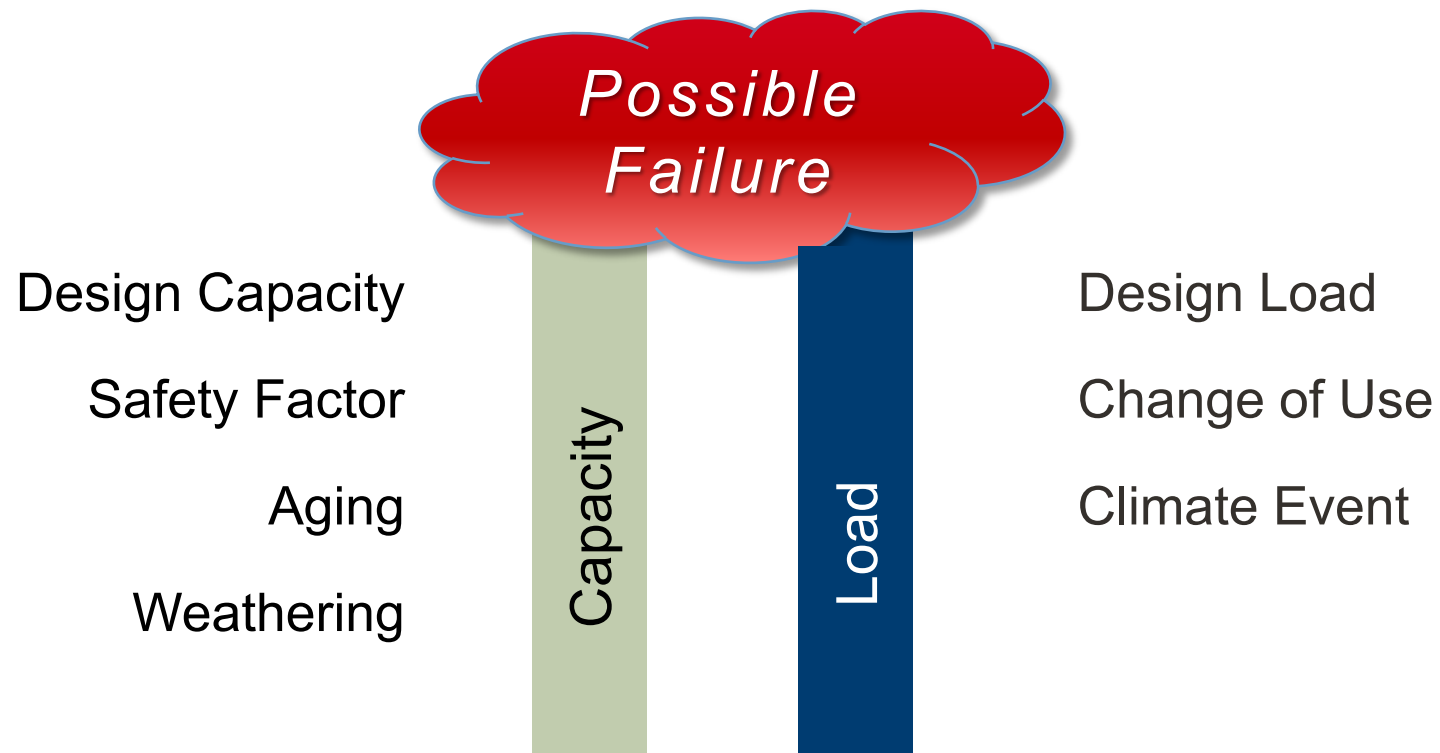
- Frequency and intensity of extreme weather events has been increasing and this trend is expected to continue.
- A lot of research focuses on anthropogenic influences on the probability of particular weather events, as well as their strength and intensity.



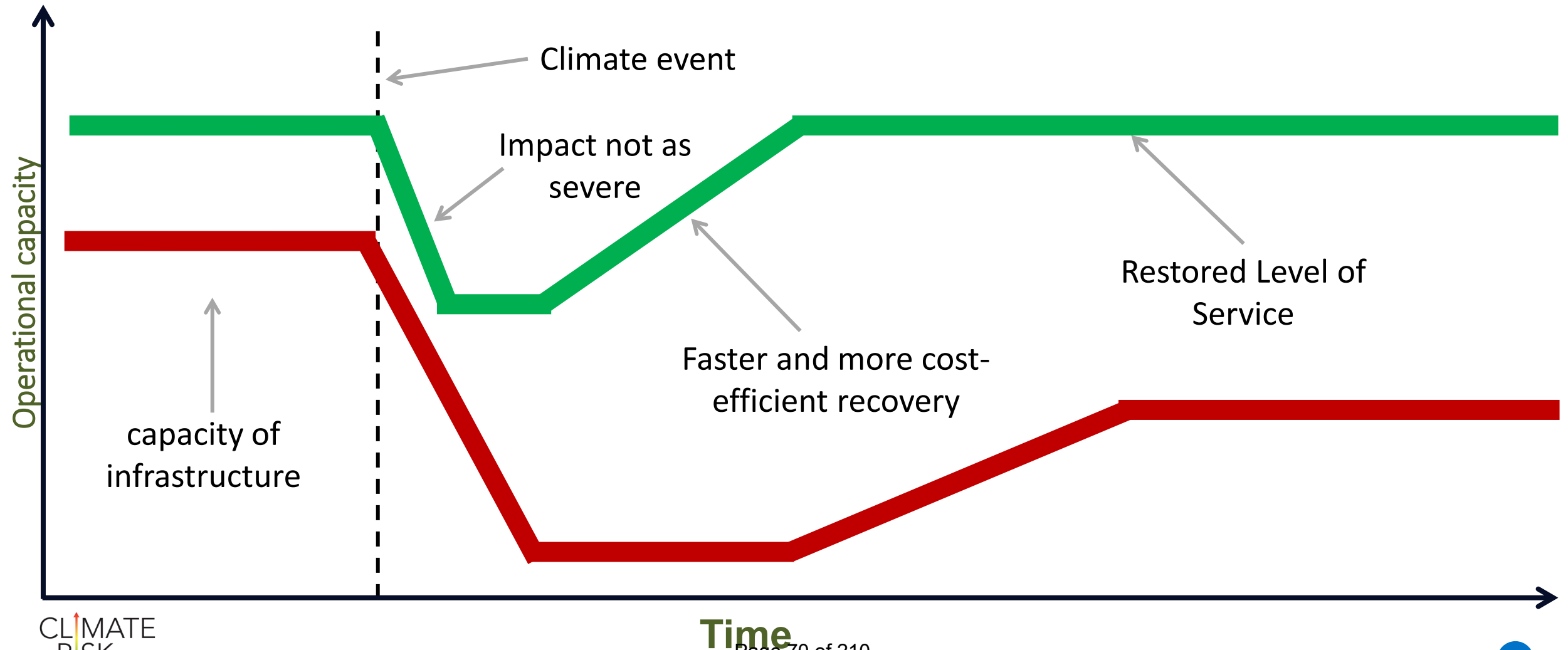
Source: Canada's Changing Climate Report, 2019



# Small Changes → Catastrophic Failure



# Unprepared vs Resilient Infrastructure Systems





# Infrastructure Interdependencies

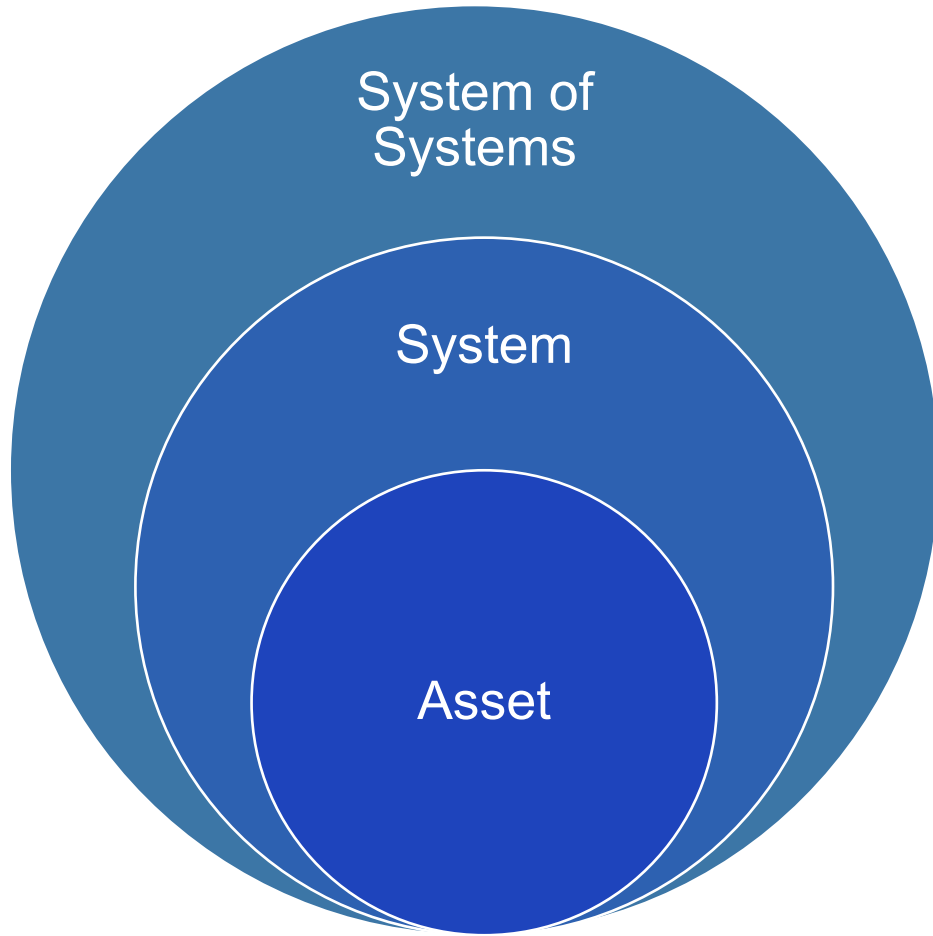
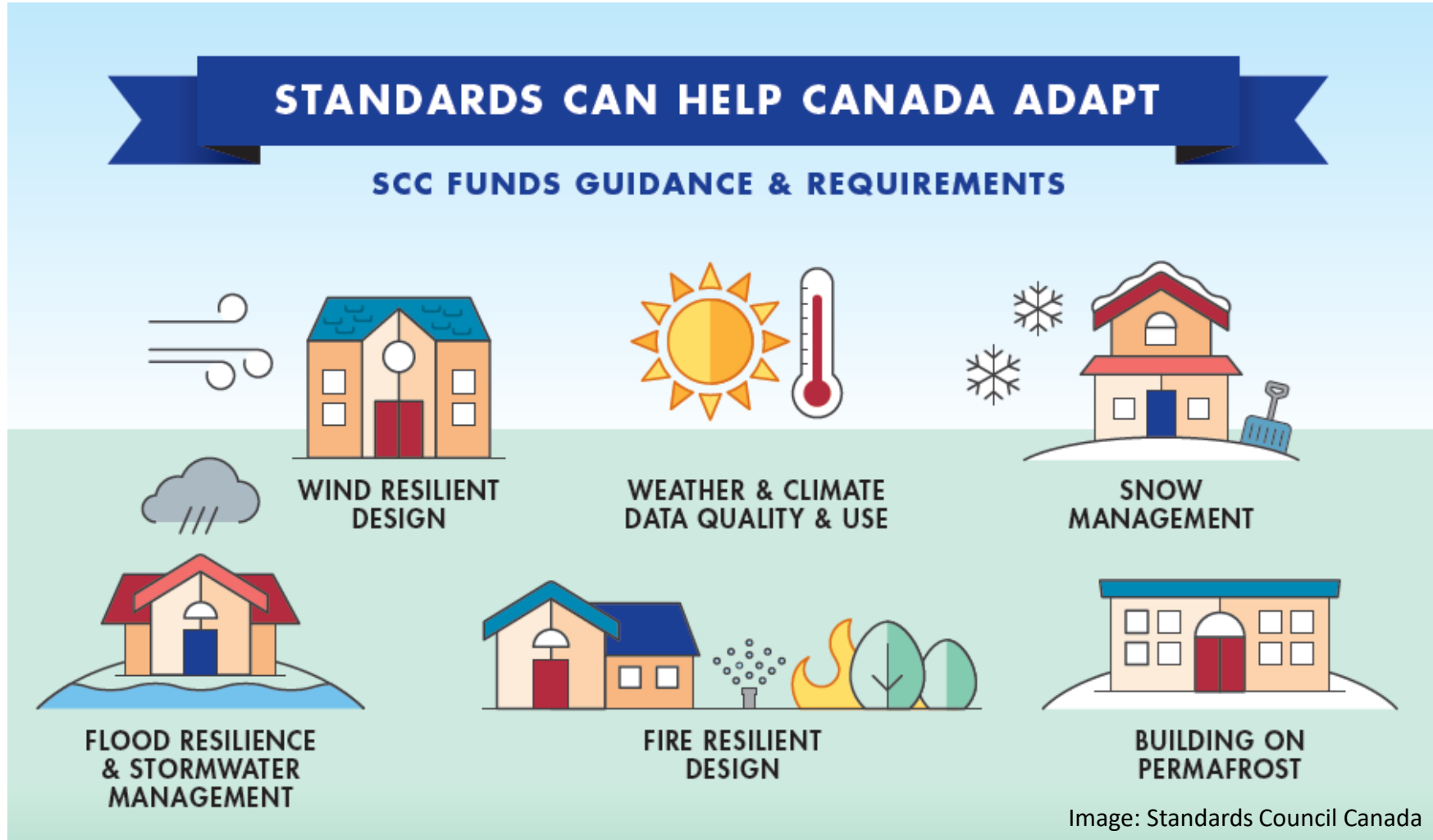


Photo source: CBC.ca (Ottawa)

# Codes and Standards





# Infrastructure

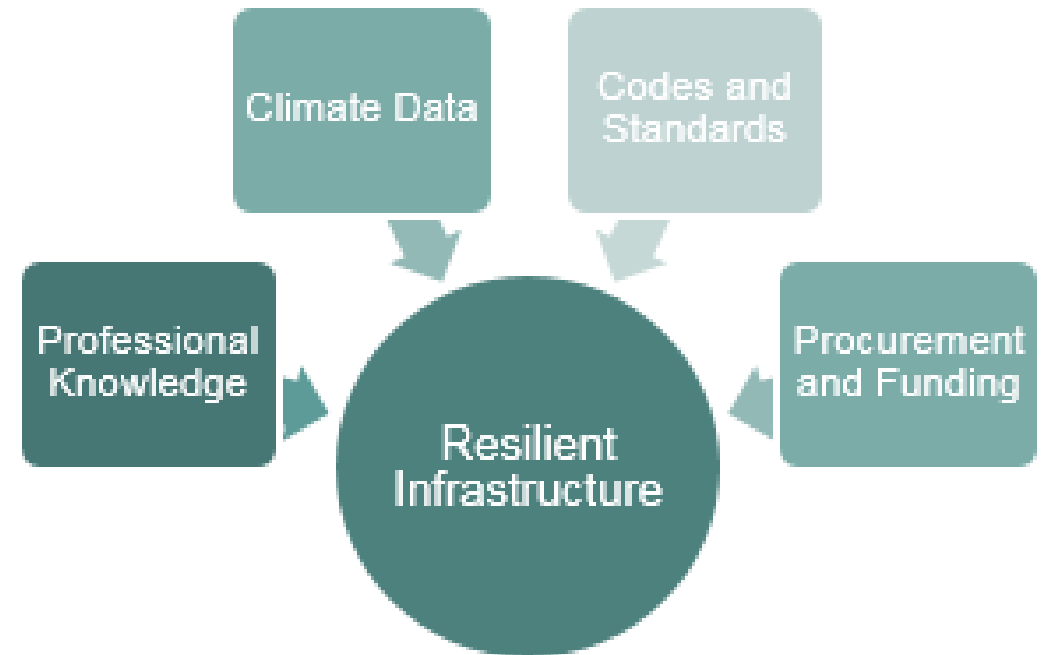
Infrastructure built today should....

- ✓ Withstand current climate impacts.
- ✓ Withstand the increased frequency, severity of current impacts and those expected in 20, 50 or more years.
- ✓ Support goal of net-zero emissions by 2050.

## Federal policy direction supports resilient infrastructure by:

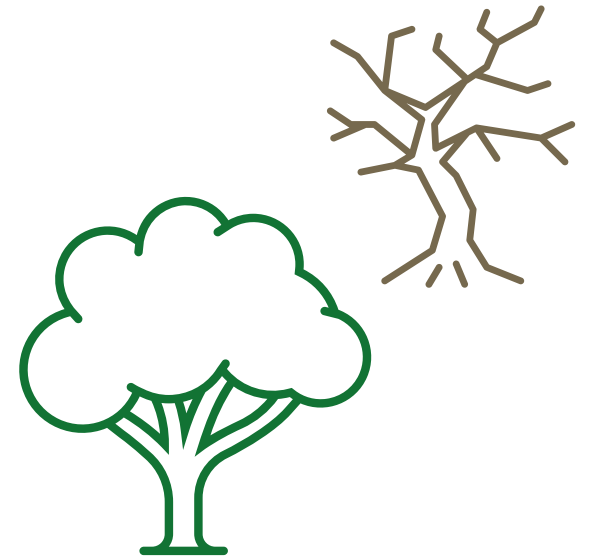
- Developing knowledge and capacity,
- Establishing requirements,
- Providing climate data,
- Providing resources (\$\$) to build resilient infrastructure.

## Four components to advance resilient infrastructure



# Agriculture and Food Security

- Food commodities across all regions experience increased risk, influenced by climate, production values, and exposed losses.
- Production and yields of important crops can be affected by:
  - Extreme heat → reduced growth
  - Late frost → kill crops
  - Drought → slower growth of orchard trees
- Local production connected to systems and food security
  - Supply chain disruptions → impacts on food prices
  - Critical infrastructure disruption → supply and food shortages
- Adaptation opportunities:
  - Communication of climate data and risk to producers
  - Support planting or transition to heat-tolerant, resilient varieties
  - Improve water management





# Energy – Generation and Distribution

- Important impacts and risk in electrical sector, including **generation** and **nuclear** power:
  - Localized flooding, coastal erosion from extreme weather events.
  - Equipment damage and accelerated degradation (e.g. shorter lifespans) from climate change and extreme weather.
  - Decreased efficiency, including cooling capacity, as water temperatures rise.
- Impacts in **transmission** and **distribution**:
  - Failures, loss of efficiency, accelerated degradation of equipment due to range of extreme weather.
- Changes in seasonal demand affect planning and system design (e.g. increase peak demand for cooling).
- Reliability of energy services impacts on **people**, communities, local economies, and essential services (health care, emergency response, communications).



# Asset Management

- The purpose of asset management is to ensure sustainable delivery of these services, by managing service, cost, and risk.
- Assets are managed to **deliver services** that support community wellbeing and economy.
- As **climate risks increase**, consider connection between asset and service





# Health and Health System Impacts



- Wide variety of health impacts including increase in certain disease vectors, including tick-borne diseases.
- Health sector institutions, services and system vulnerable to climate disruption.
- Physical and mental health risks can come from displacement, damage to homes and loss of financial savings.
- Climate driven events such as extreme heat, air quality can lead to increases in food borne diseases, blue-green algae, beach closures.

Sources: 1. CMA. <https://www.cma.ca/news/its-time-own-our-climate-impact-lancet-report-finds-canadas-health-care-sector-contributing>. 2. Canadian Institute for Climate Choices. The Health Costs of Climate Change.

# Better Health Outcomes Through Adaptation

- Health equity gap is increasing.
- Vulnerability to climate change linked to equity.
- Supporting health requires a broad range of adaptation initiatives across multiple domains.

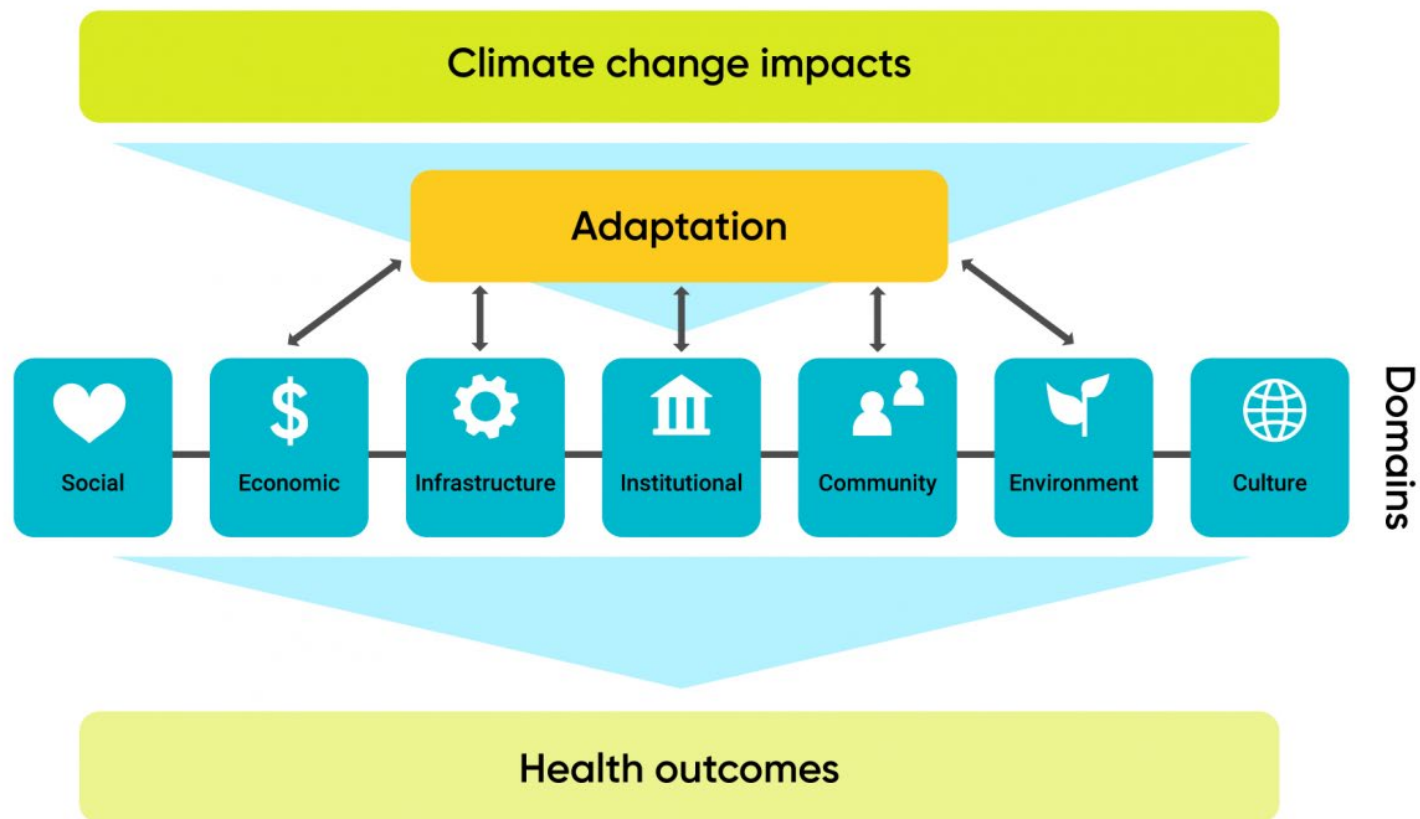


Figure 9.4: Domain-driven theoretical framework to evaluate adaptation based on justice concerns. Boeckmann & Zeeb, 2016. In *Health of Canadians in a Changing Climate*



# Greenspaces and Natural Assets

- Natural assets and greenspaces play vital role in managing range of climate risks.
- Natural assets that are lost or not maintained, lead to loss of important services and reliance on expensive infrastructure.
  - E.g. routing a creek through a culvert requires ongoing maintenance and eventual renewal of the culvert.
- Protecting and restoring natural assets throughout region reduces climate risks, provides financial, environmental and social value.

Natural Assets	Enhanced Assets	Engineered Assets
Wetlands Forests Parks Lakes, Rivers, Creeks Fields Soil	Rain gardens Bioswales Urban Trees Urban Parks Biomimicry Stormwater Pond	Permeable pavers Green roofs Rain Barrels Green Walls Cistern



# Planning and Housing

- Canadians want **new housing** that is **resilient** to the impacts of climate change.
- Planning and housing policy tools can be mobilized to support resilience.
- Co-benefits possible through smart design and planning.
- Natural and built environments **act together** to provide services for community, including hazard management.



Impervious 'hard' surfaces (roofs, roads, large areas of pavement, and asphalt parking lots) increase the volume and speed of stormwater runoff. This swift surge of water erodes streambeds, reduces groundwater infiltration, and delivers many pollutants and sediment to downstream waters.



Pervious 'soft' surfaces (green roofs, rain gardens, grass paver parking lots, and infiltration trenches) decrease volume and speed of stormwater runoff. The slowed water seeps into the ground, recharges the water table, and filters out many pollutants and sediment before they arrive in downstream waters.



# Reflection - Revisiting

- What are your highest priorities in the short-term for your constituents, communities and the region?
- What are your priorities for longer term social, economic, environmental goals for the community?
- **REVISIT** – New reflections on how the impacts of **changing climate** threaten your ability to achieve those objectives or to make progress on those priorities?





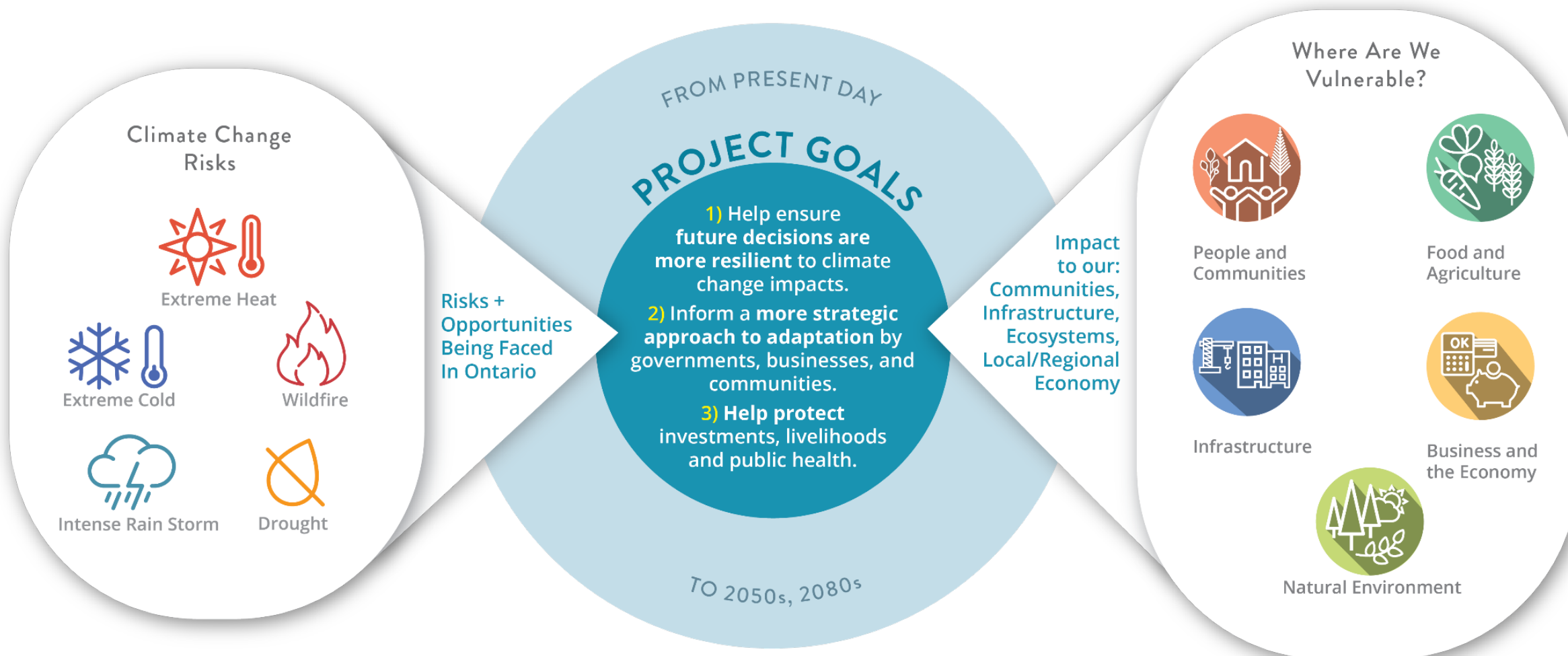


## **Part II - Provincial Climate Change Impact Assessment**



# Project Overview

- ✓ Multi-sector climate impact assessment
- ✓ 5 Areas of Focus; 6 Regions

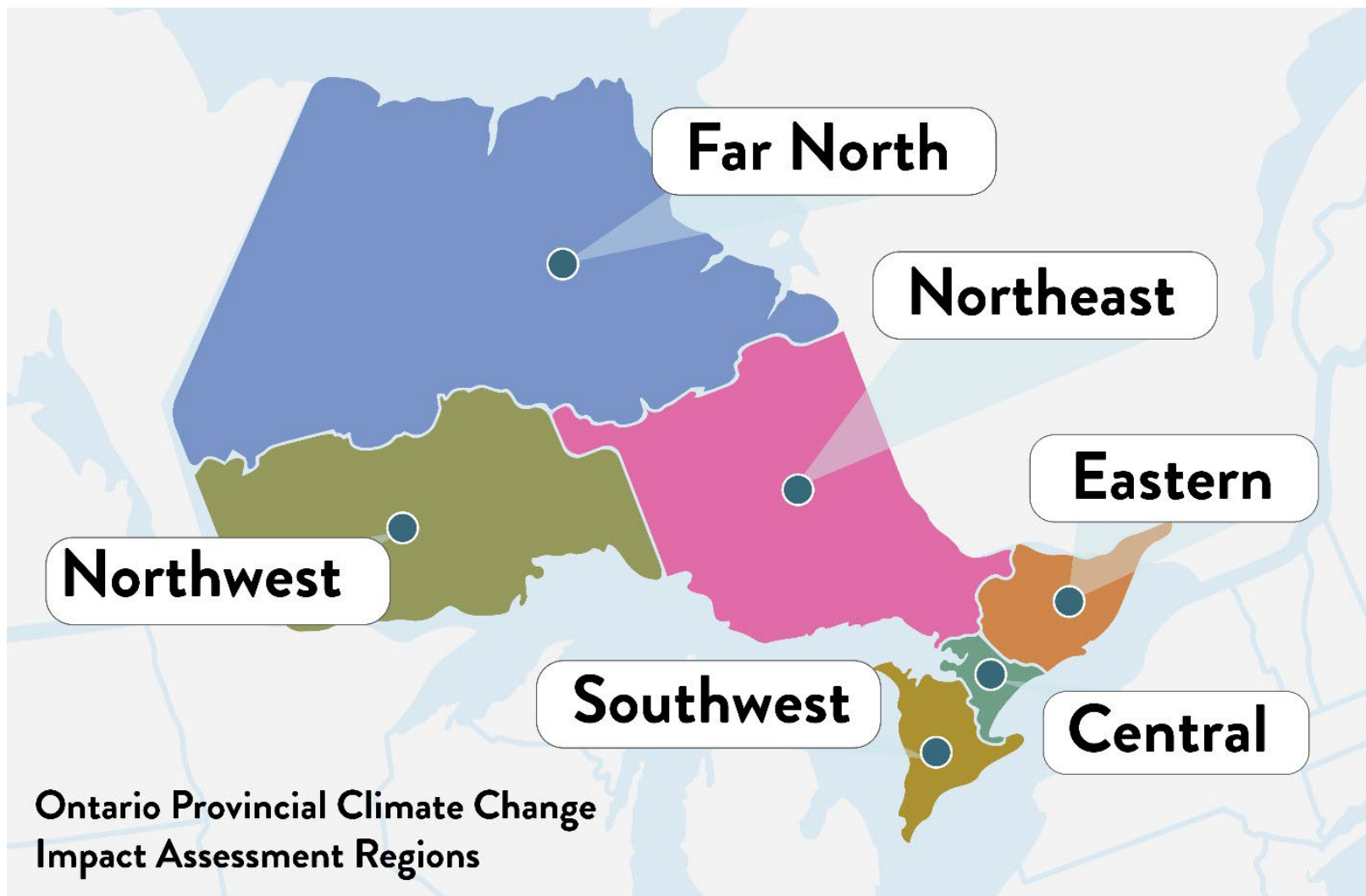


# Key Project Elements

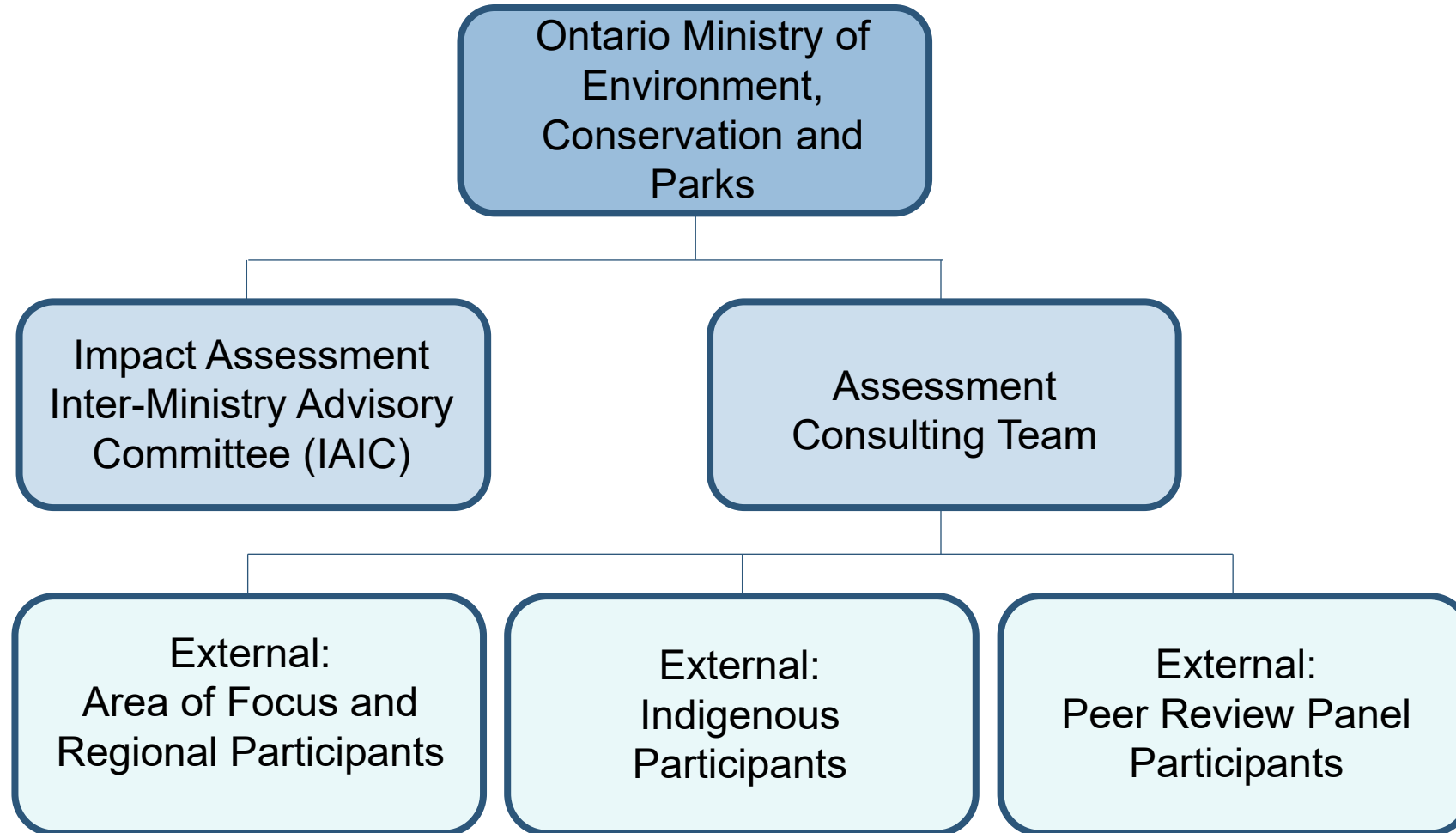




# Geographic Regions



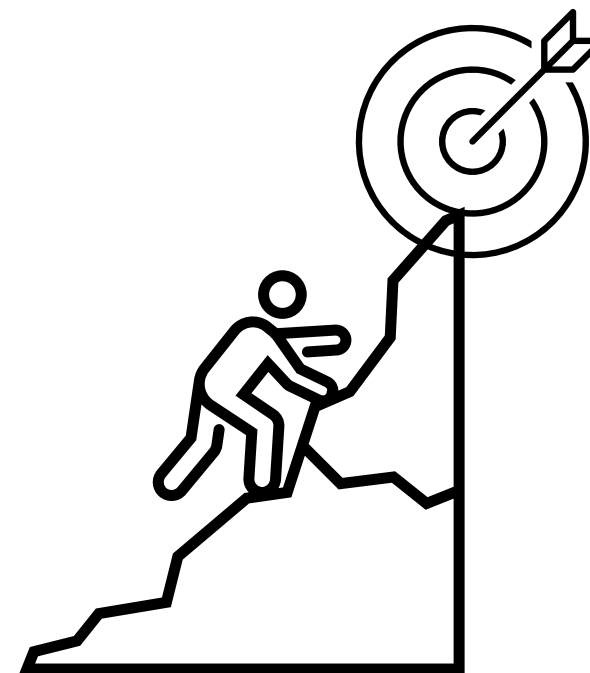
# Project Participants





# Project Objectives

- Improve our understanding to **inform future decisions** that build more resilience to climate impacts
- Provide a **methodology that is scalable** and can be replicated to support local assessments and future assessments
- Provide a **baseline** from which future provincial assessments could be built upon
- Inform **strategic approaches** to adaptation by governments, businesses and communities
- Support **decision-making that protects** investments, livelihoods and public health

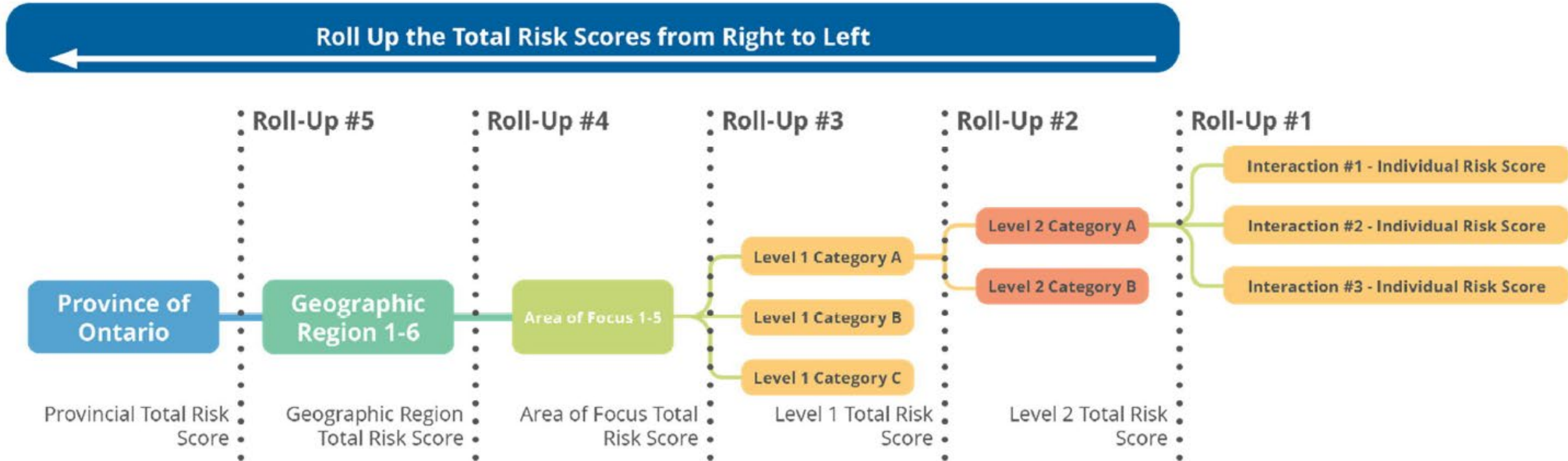


# Information Inputs



Applied qualitative and quantitative data to characterize risks and opportunities

# Risk Roll-Up Approach



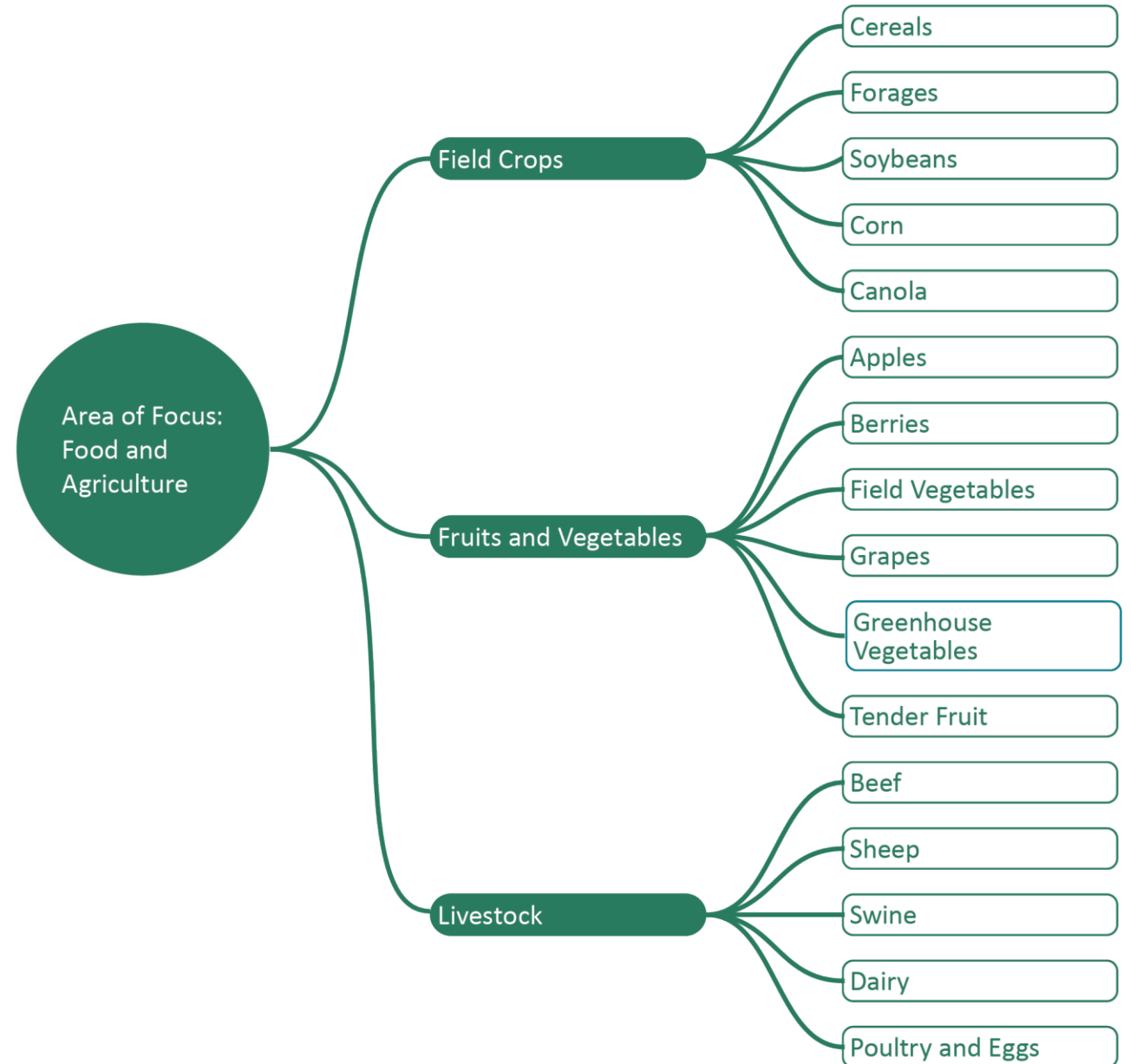


# Area of Focus Delineation



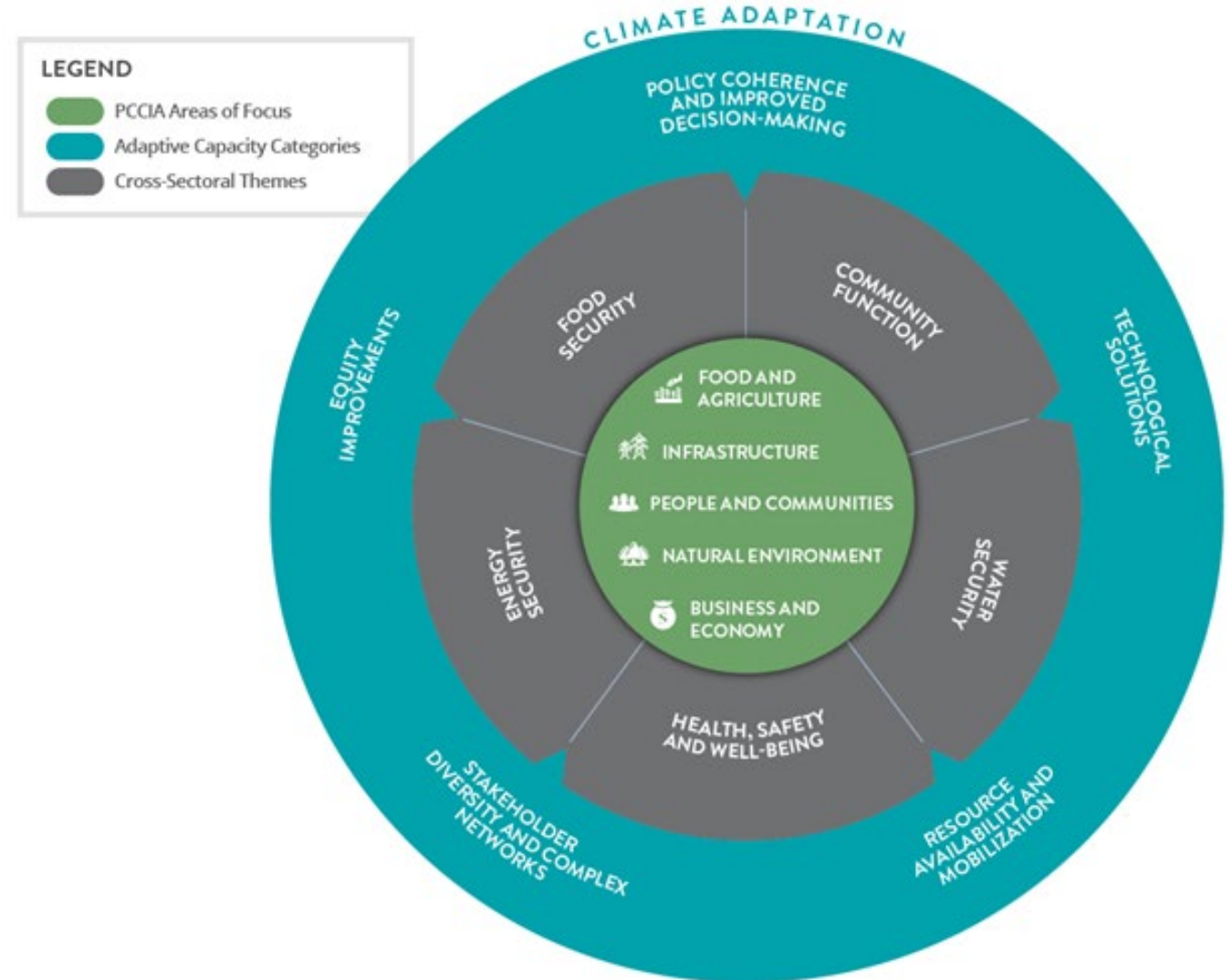
# Food And Agriculture

- Each *Area of Focus* broken down in multiple levels or categories analysis.
- E.g., within Food and Agriculture:
  - Livestock
  - Field Crops
  - Fruits and Vegetables



# Cross-Sectoral Themes

- Climate impacts occur in a complex, dynamic environment!
- Analysis considered cross-sectoral interactions
- Framework was used to illustrate how impacts cascade across a theme, and the opportunities for adaptation interventions across sectors.





# Example 1: Analysis and Results Food and Agriculture

Changing climate conditions could present opportunities for agriculture in Ontario, but **such benefits may be offset or overwhelmed by negative impacts**, resulting in declining productivity, crop failure, and livestock fatalities. **Several commodities are expected to face ‘very high’ climate risks by the end of the century.**

In addition to direct impacts to crop and livestock productivity, Ontario’s agricultural sector is **vulnerable to indirect impacts** caused by climate interactions with pests and diseases, soil and water conditions, and infrastructure that is critical for agricultural production. With **proactive adaptation** by the agri-food industry, Ontario producers may experience more stability, lower economic losses from climate-related impacts and stronger competitive advantage.



# Food and Agriculture Risk Levels



## Level 1 Category



Field Crops

Now



High Risk

2050s



High Risk

2080s



Very High Risk



Fruits and  
Vegetables



High Risk



High Risk



Very High Risk



Livestock



Medium Risk



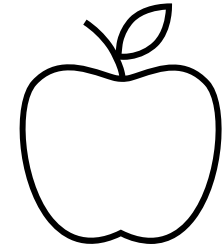
High Risk



High Risk

# Apples and climate risk results

- **High** (current) and **very high** (by 2050s) risk for apple crops across Ontario, including central region.
- Sources of climate risk:
  - Late frosts can result in significant kill.
  - Drought conditions slow root and tree growth lowering yields
  - Temperatures above 32°C cause heat stress (stunting growth)
- Indirect impacts can affect producers, including risks to key pollinator species.
- Worker safety and productivity important consideration, including exposure to extreme heat events.
- Adaptation:
  - Adaptation needs to be priority as capacity to adapt lower
  - Ensure worker safety through programs and policies
  - Diversify and plant new varietal that have greater resilience
  - Address indirect risks. E.g., cultivate diverse wild bee species

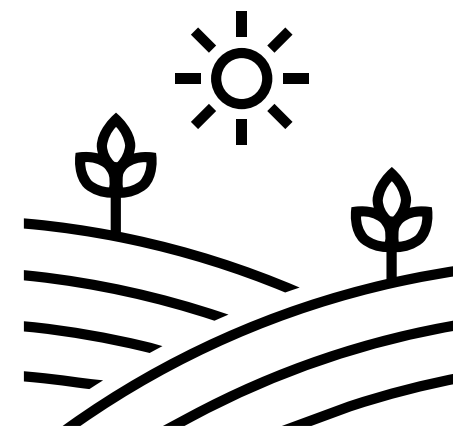




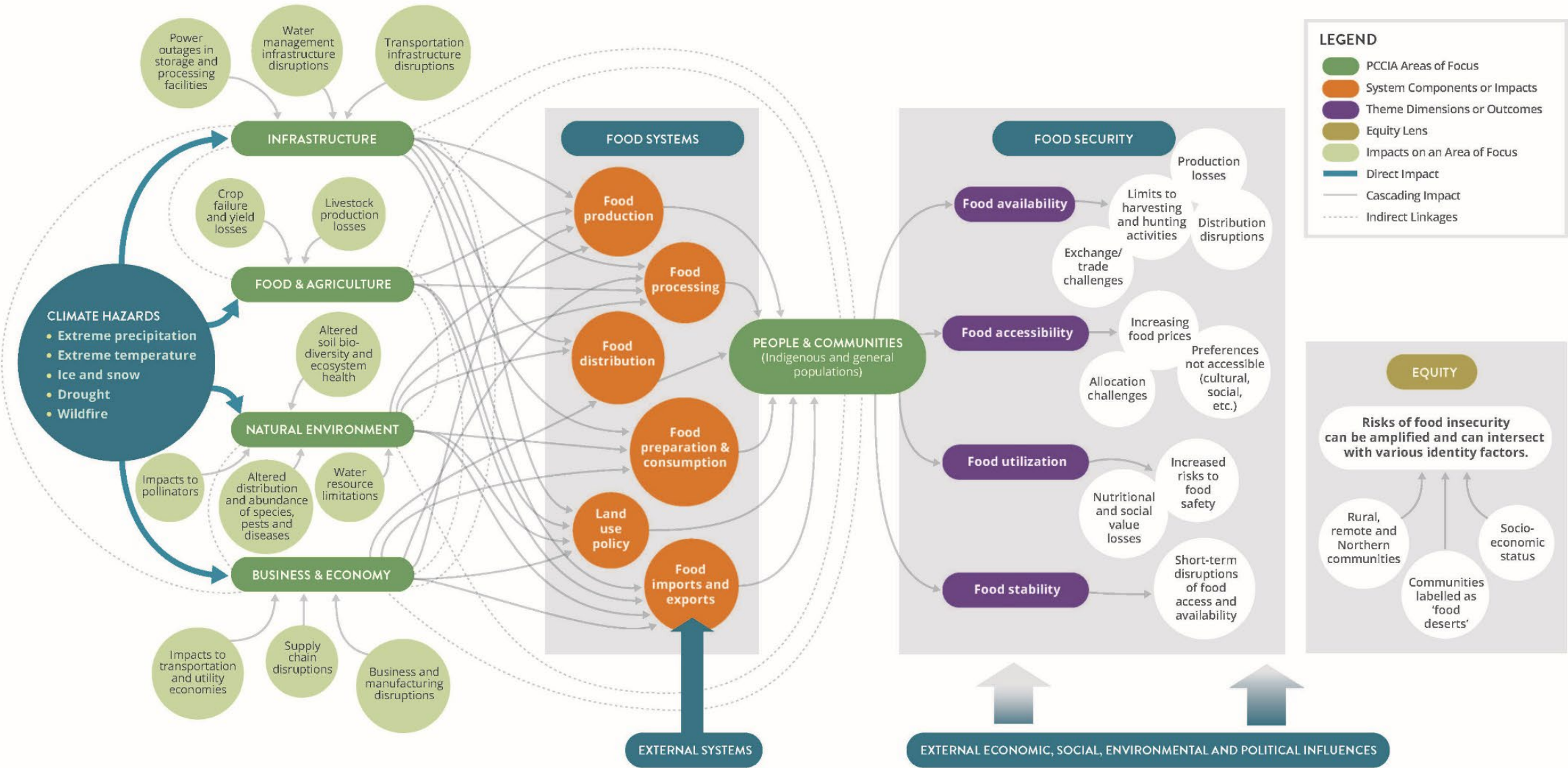
# Food Security

With elements of productivity, processing, transportation, distribution and large retail, the agri-food system in Ontario is complex and has many points of interaction with weather and climate. **System-wide resilience with a focus on areas that are known to be vulnerable to climate change and regions that are more food insecure, will improve system resilience.**

**Climate-related impacts on food security vary across Ontario and stand to contribute to existing vulnerability and inequities.** A variety of social, cultural, and economic determinants can be used to identify pre-existing vulnerability to food insecurity in Ontario. Low-income households and neighbourhoods, remote regions, and Indigenous Communities have been identified as being at a disproportionate risk of food insecurity in Ontario.



# Food Security Connections



# Food Security – Climate Impacts

## Food Production

- Crop failure and yield losses; livestock production losses and feed shortages.
- Soil health degradation causes lower yields and declining productivity.
- Limitations to water access impact irrigation.
- Increased in pests and disease, and declining pollinator species.
- Changes in species distribution and abundance impact food security for subsistence hunters and harvesters.

## Food Processing

- Risk of prolonged power outages in food storage and processing facilities, results in wide- reaching consequences.
- Disruptions to water management infrastructure and limitations to water access.
- Disruptions and delays to the transportation of food inputs to processors and manufacturers.

## Food Distribution

- Impacts to utility and transportation infrastructure result in implications for food distribution to markets, retailers, and consumers.
- Supply chain disruptions causes shortages of food products and influence food affordability.
- Disruption to public transportation and infrastructure can impact food accessibility for retailers and consumers.

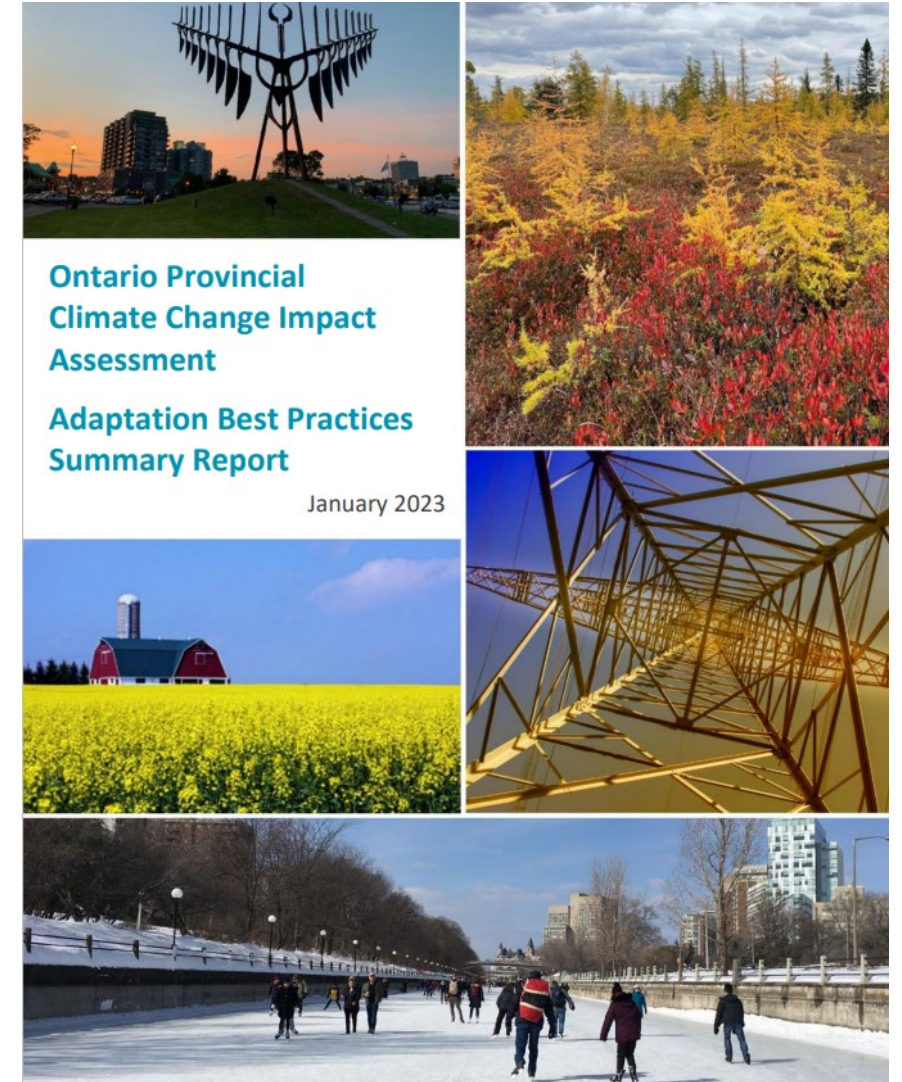
## Food Preparation and Consumption

- Increased occurrence and persistence of bacteria, viruses, parasites, and their vectors increase risks from food-borne illnesses.
- Climate-related impacts could result in declining nutritional content of some agricultural crops.
- Reduced access to a range and diversity of foods options in Ontario throughout the year from declining imports.



# Adaptation Best Practices Report

- Comprehensive report on sector and cross-sector best practices.
- Designed for decision-makers and policy-makers.
- Range of adaptation and resilience measures included.
- Considers existing 'Adaptive Capacity'
- Cautions against mal-adaptive measures!
- Included:
  - actions for each sector (e.g., Agriculture and Food)
  - actions that are cross-sectoral



# Directions - Findings of the PCCIA

## Direct Impacts

Ontario has a relatively **high capacity to adapt**, but this capacity has not yet been mobilized widely nor sufficiently to build resilience, **but** ability to adapt is not uniformly distributed across Ontario.

### **Selected areas to prioritize adaptation:**

- Indigenous Communities
- Vulnerable and unhoused populations
- Stormwater infrastructure
- Field crop, fruit and vegetable commodities

## Indirect impacts

Climate change occurs within complex, dynamic systems, and impacts can ‘cascade’. To build resilience requires addressing connections.

### **Selected resilience actions:**

- Coordinate adaptation to enhance climate resilience between interconnected sectors
- Increase collaboration to support resilient, safe supply of water
- Act to address existing health inequities and vulnerability
- Develop approaches that consider climate in policy and decision-making.

# Principles and Pitfalls for Climate Change Adaptation

## Principles for Building Resilience

- ✓ Ensure resilient foundations through rapid and inclusive development.
- ✓ Facilitate the adaptation of businesses and people.
- ✓ Adapt land use patterns and protect critical public assets and services.
- ✓ Increase people's capacity to cope with and recover from shocks.
- ✓ Anticipate and manage macroeconomic and fiscal risks.
- ✓ Ensure effective implementation through prioritization and continuous monitoring.

## Mal-adaptive

- ⊗ Focusing on technological fixes versus holistic approaches;
- ⊗ Difficulty of distinguishing the difference between adaptation and development;
- ⊗ Difficult in quantifying unquantifiable metrics and thus using inaccurate indicators to measure success; and
- ⊗ Competing challenges that lead to adaptation not being prioritized.



# Tangible Cross-Cutting Actions For Resilience

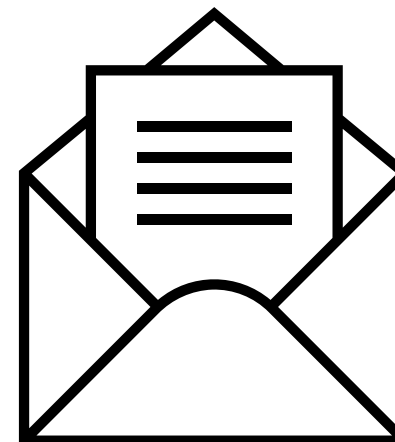
Adaptation Category	Examples of Adaptation Measures
Projects or Programs	<ul style="list-style-type: none"> <li>Facilitate access to relevant climate and hydrological data</li> <li>Review and implement flood risk strategies in high-risk areas</li> <li><b>Adopt Nature Based Solutions</b></li> <li>Develop a suite of decision-support tools for climate change adaptation</li> </ul>
Research and Development	<ul style="list-style-type: none"> <li>Integrate monitoring and evaluation of adaptation planning</li> <li>Leverage larger city-based resiliency networks in Canada and internationally</li> </ul>
Investment and Incentives	<ul style="list-style-type: none"> <li>Develop programs and enhance policies that support</li> <li>Promote <b>Nature-Based Solutions</b> and increase protection of green spaces and green infrastructure</li> </ul>
Policy and Regulation	<ul style="list-style-type: none"> <li>Apply a climate lens to government decision-making</li> <li>Embed climate risk in land use planning and policy</li> <li>Apply an equity lens to all climate change adaptation planning</li> <li>Apply an Indigenous lens to all climate change adaptation planning</li> </ul>

# Tangible Actions Within Sector

Adaptation Category	Examples of Adaptation Measures (Food and Agriculture Sector)
Projects or Programs	<ul style="list-style-type: none"> <li>Strengthen <b>monitoring and surveillance</b> programs for pest and disease management.</li> <li>Expand decision support tools for on-farm water, soil and nutrient management.</li> <li>Enable demand-driven knowledge transformation and transfer through collaboration between researchers and farmers.</li> </ul>
Research and Development	<ul style="list-style-type: none"> <li>Support and advance research on agricultural expansion opportunities.</li> <li>Undertake research and development in new, climate-resilient varieties or species.</li> <li>Fund a knowledge transfer and sharing program for practical adaptation and best management practice sharing with Indigenous knowledge at its core.</li> </ul>
Investment and Incentives	<ul style="list-style-type: none"> <li>Advance research on agricultural expansion opportunities under a changing climate.</li> <li>Support technological research and advancements on precision agriculture, advanced drainage and irrigation systems.</li> </ul>
Policy and Regulation	<ul style="list-style-type: none"> <li>Apply a climate lens to government decision-making, integrate Indigenous perspectives.</li> <li>Invest and strengthen coordination and integration of water management</li> </ul>

# Provincial Report - Take-Away Messages

- **The climate has changed.** Between 1948 and 2016, average temperatures have risen 1.3°C and total precipitation has increased by 9.7% in Ontario.
- **Ontario has already experienced significant climate impacts** from flooding, wildfires, heat waves, ice storms and many other events.
- **The climate will continue to change.** In fact, we are locked into climate impacts over the next half century, with impacts expected to become more frequent and more extreme.
- **There is an urgent need to act, to prepare and to invest.** The impacts associated with a changing climate have become more apparent in daily life, increasing risks to social, economic, cultural and ecological systems.





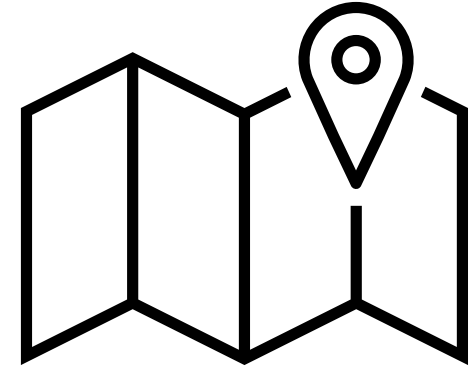
# Activity – Explore the Reports

- Thinking about your highest-priority issues... what information would you expect to see in the provincial report?
- How do you think the report data can support local issues and planning?
- What question would you like to ask about the report?



# Adaptation best practices - exploration

- Adaptation best practices report describes actions in four distinct themes, for each Area of Focus.
- Types of actions:
  - Projects or programs
  - Research and development
  - Investment and incentives
  - Policy and regulation
- ACTIVITY:
  1. Open the [Best Practices Report!](#)
    - *Thank you to Seniors for Climate Action Now for posting it.*
  2. Find Section 7.0 “People and Communities” then find the table “Examples of Adaptation Measures”.
  3. **Questions:**
    1. Which measures would help your constituents?
    2. Which of the actions listed in table 7-3 do you think the region or the lower-tier municipalities could implement?



## Table 7-3. Areas for People and Communities Climate Adaptation

Adaptation Category	Examples of Adaptation Measures
<b>Projects or Programs</b>	<ul style="list-style-type: none"> <li>• Provide funding and programming support for development of heat event response planning for municipalities.</li> <li>• Promote Indigenous-led adaptation projects and programs.</li> <li>• Provide consistently available and up-to-date emergency planning guidance to communities.</li> <li>• Encourage the use of innovative technology to increase capacity to respond to climate-related health crises (e.g. emergency response planning scenarios)</li> </ul>
<b>Research and Development</b>	<ul style="list-style-type: none"> <li>• Advance research to fill remaining knowledge gaps on climate changes impacts to people and communities in Ontario</li> </ul>
<b>Investment and Incentives</b>	<ul style="list-style-type: none"> <li>• Invest in early warning systems for climate hazard events.</li> <li>• Invest in the establishment and enhancement of extreme heat impact reduction strategies.</li> <li>• Adapt food resource management in the face of climate change and provide funding for resurfacing of Traditional Ecological Knowledge</li> </ul>
<b>Policy and Regulation</b>	<ul style="list-style-type: none"> <li>• Develop policies and tools to support respectful and meaningful incorporation of Indigenous knowledge systems into adaptation planning and decision-making.</li> <li>• Reframe adaptation policies to be culturally appropriate for Indigenous communities.</li> <li>• Include a wide breadth of rights holders and stakeholders in public policy development and decision-making.</li> </ul>

*Table 7-3. Areas for People and Communities Climate Adaptation. Recreated from the Adaptation Best Practices online PDF report.*

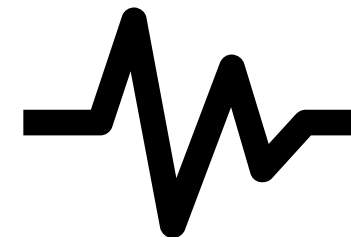
*Thank you to Seniors for Climate Action Now for posting the [Adaptation Best Practices Report](#).*



## Example 2: Health, Safety And Well-being

Existing human **health inequities across Ontario will be worsened** by climate change. Health-related adaptation requires involvement from both inside and outside of the health sector, as well as coordination across levels of government and Indigenous Organizations and Communities.

Prioritizing adaptation **actions to address existing health inequities and vulnerability will minimize negative climate-related outcomes** for the health, safety, and well-being of Ontarians.



# Health, Safety And Well-being

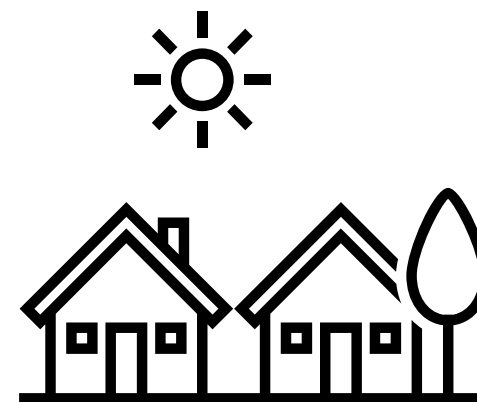
Infectious Diseases	Water and Food Safety	Mental Health and Well-being	Declining Air Quality	Public Safety and Emergency Response	Extreme Temperature Exposure
<ul style="list-style-type: none"> <li>• Increased prevalence of infectious diseases, due to an expansion of their vectors and more favourable conditions for transmission (e.g. West Nile and Lyme Disease).</li> <li>• Increased prevalence of pathogens and disease outbreaks in wildfire (e.g. deer and moose), cascading to human health and safety risks.</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts on water quality and quantity can increase risk of water-borne diseases.</li> <li>• Increased occurrence and persistence of bacteria, viruses, parasites, and pathogens across the food system, increasing risk of food-borne illnesses.</li> <li>• Harmful algal blooms can have significant human health impacts associated with exposure through drinking water systems and recreational water use.</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts on culture and heritage, language, and knowledge transmission.</li> <li>• Climate-related disasters can often lead to mental health outcomes.</li> <li>• Degradation of cultural identity and community cohesion.</li> <li>• Climate grief can affect mental health and well-being, resulting in emotional and behavioural responses, such as worry, grief, anxiety, anger, hopelessness, and fear.</li> </ul>	<ul style="list-style-type: none"> <li>• Extreme heat events can increase smog and ground-level ozone.</li> <li>• Wildfire smoke can cause the exacerbation of asthma and respiratory conditions.</li> <li>• Drought conditions can contribute to increased dust.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased likelihood of accident, injuries and mortalities during extreme weather and flooding events.</li> <li>• Power outages and damage to critical infrastructure, result in a disruption of critical and emergency services.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased risk of heat-related illness and mortality.</li> <li>• Increased hospitalization rates during extreme heat events, resulting in capacity constraints.</li> <li>• Health impacts associated with extreme heat are exacerbated by the urban heat island effect.</li> </ul>

## Example 3: Community Function

Climate change impacts community function both directly, through different climate and weather events (e.g. extreme precipitation or wildfire), and indirectly, through a range of environmental, infrastructure, and economic pathways.

**Community-level adaptation planning and response should seek to address social inequities and similarly, investments to address social inequity will lead to greater climate resilience.**

**Use of approaches that consider future climate change** considerations will provide opportunities for making policy decisions to improve infrastructure redundancy, emergency response management, foster social support and inclusion, economic stability, and ecological stewardship.





# Community Function

Social Support and Inclusion	Economic Stability	Access and Infrastructure Redundancy	Emergency Response Management	Ecological Stewardship	Land Use Planning and Development
<ul style="list-style-type: none"> <li>• Property damage and communications system failures result in lack of access to support and daily needs.</li> <li>• Localized and widespread power outages leading to service disruptions.</li> <li>• Altered distribution and abundance of species of importance for Indigenous Communities impacts food security and culture.</li> </ul>	<ul style="list-style-type: none"> <li>• Asset and infrastructure loss and damage, decrease in asset serviceable lifespan, supply chain disruptions.</li> <li>• Changes in consumer demand for seasonal goods and services, health and safety impacts on staff.</li> <li>• Changes in availability of key industrial inputs and costs, leading to production delays.</li> </ul>	<ul style="list-style-type: none"> <li>• Compromised access to services.</li> <li>• Damage to roads, property and infrastructure, power outages and shutdowns of facilities providing essential goods and services.</li> <li>• Blocked access for emergency vehicles caused by flooding.</li> <li>• Disruption of supply chains for medicines, food etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Power outages, damages to critical infrastructure disrupt critical services (e.g. healthcare etc.).</li> <li>• Extreme weather affects response actions including evacuation, search and rescue, emergency services, and recovery of critical infrastructure.</li> <li>• Weather-related impacts on infrastructure and natural environment amplify risks to personal safety and security.</li> </ul>	<ul style="list-style-type: none"> <li>• Degradation of air and water quality, new pathogens, pests and diseases, changes in ecosystem health and services.</li> <li>• Compromised environmental sustainability, poor physical and mental health outcomes, limited access to nature and decreased quality of life.</li> <li>• Critical infrastructure failure could have significant cascading impacts on surrounding ecosystems and communities.</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts on critical infrastructure, agricultural lands and production, ecosystem health and services, recreation, fishing, cultural heritage resources and assets.</li> <li>• Coupled with socio-economic changes (e.g. population growth) these impacts result in the need to adjust land use planning and development approaches</li> </ul>



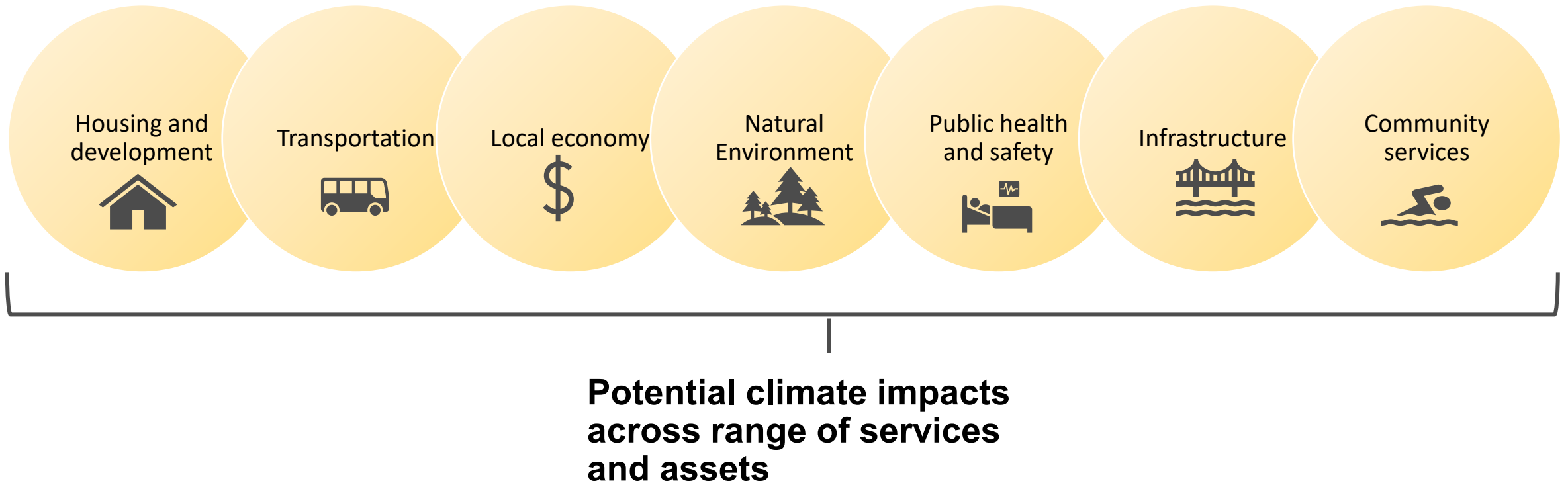


## **Part III - Strategic Direction for Future Climate Resilience work**



# Resilience as a through-line

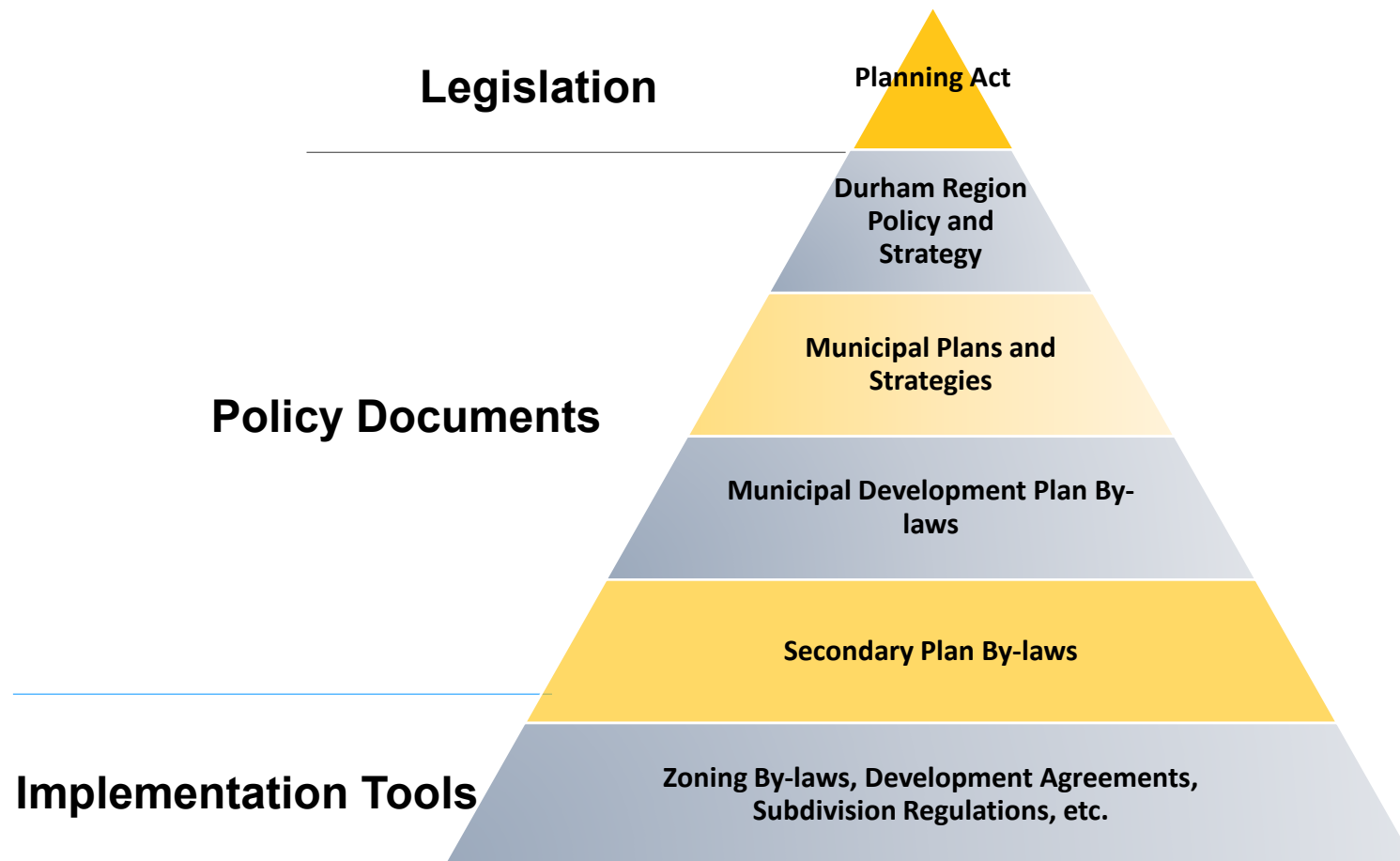
Elected officials and municipal staff have a direct influence on many areas of community development and function:





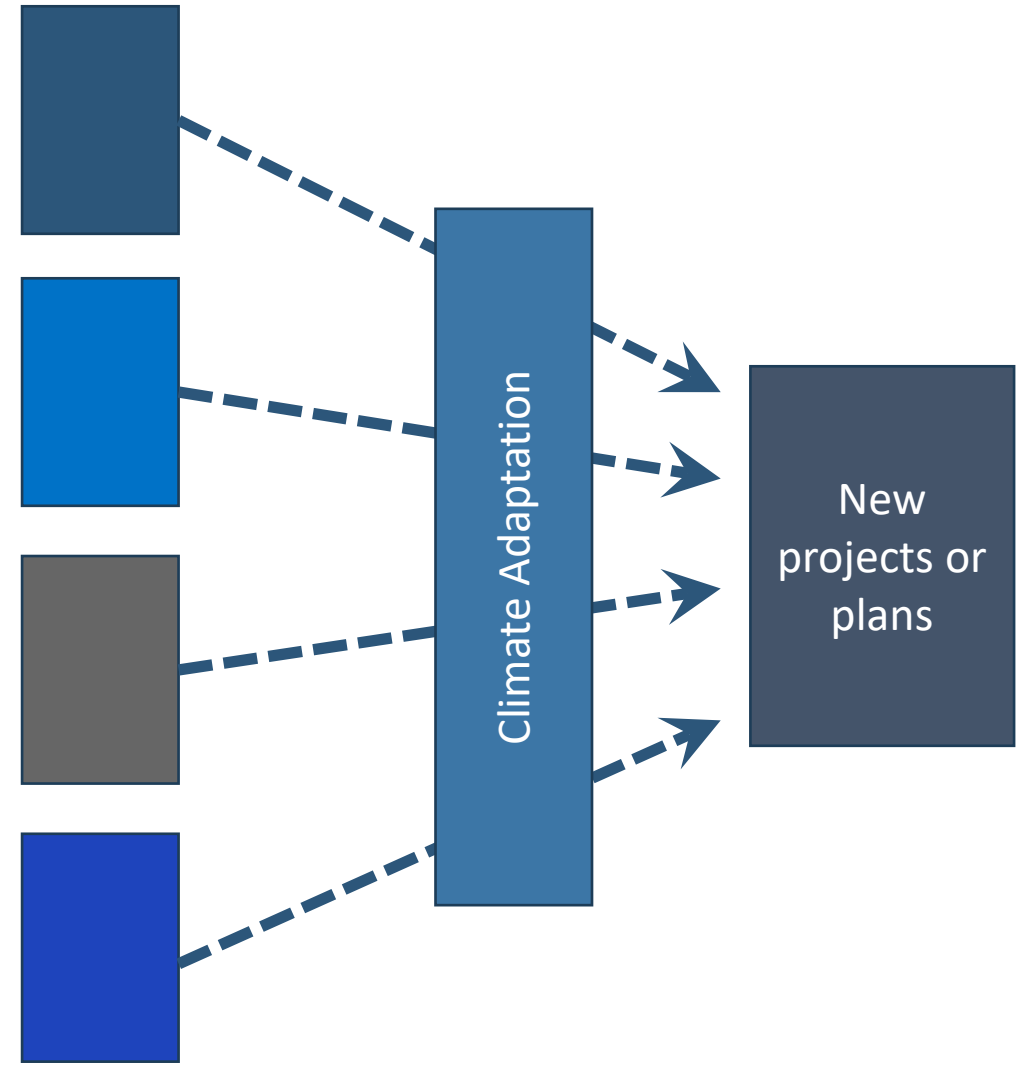
# Policies and Policy Tools Interact

- Policy and decision-making across variety of policy areas are connected to climate resilience outcomes.
- Policies and implementation tools work at multiple scales.
- Regional and Municipal Policies can be connected and coordinated.
- Implementation tools – zoning, incentives, regulations, development charges – can be used to put in place resilience measures.



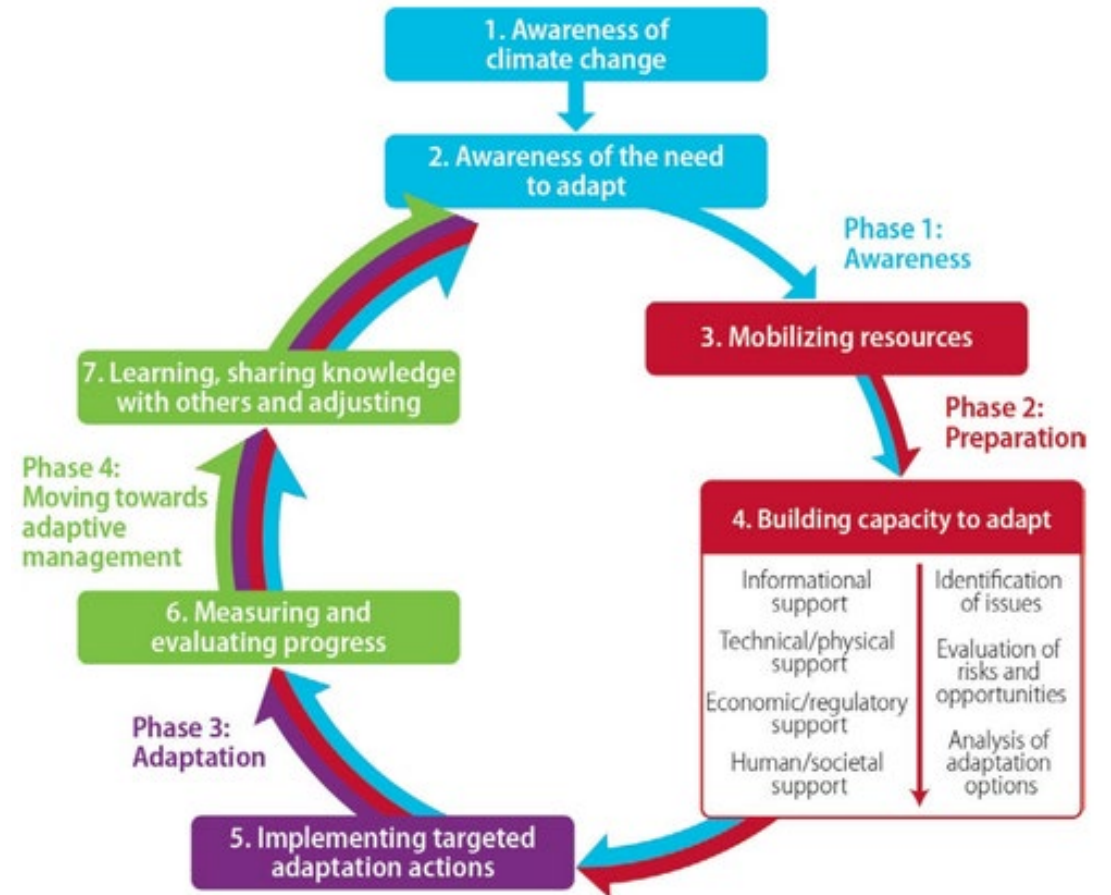
# Mainstreaming

- Sometimes referred to as ‘climate policy integration’
- Integrating related government policies into several sectors OR
- Creating an institutional/organizational structure that automatically accounts for climate change adaptation needs



# Adaptation is a Process

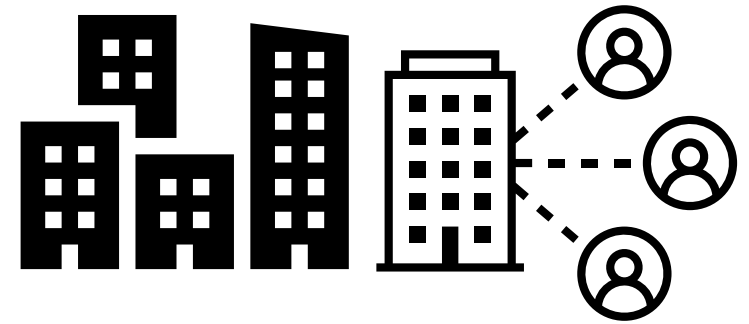
- Building resilience must be an ongoing process and priority.
- Process of:
  - Mobilizing resources
  - Assessing
  - Implementing
  - Monitoring
- Throughout:
  - Communication!
  - Learning!
  - Adding new knowledge and information (including new climate data)





# National Direction On Resilience

- Requirement for risk assessment to access infrastructure funding (Climate Lens).
- Increased **support** from federal level for climate resilience, including:
  - Infrastructure resilience
  - Risk assessment
  - Climate data
- Expectation that professional and infrastructure sectors with **upskill** with essential climate competencies.
- **Key programs and policies:** Infrastructure Canada; Environment and Climate Change Canada; Federation of Canadian Municipalities; Natural Resources Canada; National Research Council; Standards Council of Canada.



# Provincial Directions On Resilience

- **Planning Act** – identifies mitigating GHG emissions and **adaptation** to a changing climate as matters of provincial interest and directs Official Plan to include “policies that identify goals, objectives and actions to mitigate GHG emissions and to provide for adaptation to changing climate, including through increasing resiliency” Section 16(4)
- **Provincial Policy Statement** - Minimizes negative impacts from, and prepares for the impacts of a changing climate through policies related to: Healthy, livable and safe communities; long-term economic prosperity; density and mix of land uses; risks associated with natural hazards; infrastructure and public facilities; and, land use and development patterns.
- **Regional Growth Plans** - including the Growth Plan for the Greater Golden Horseshoe – looks to integrate climate change considerations into managing growth that is adaptive to the impacts of a changing climate

# Example - City of Windsor

## Windsor's stated objectives

1. Integrate Climate Change Thinking and Response
2. Protect Public Health and Safety
3. Reduce Risk to Buildings and Property
4. Strengthen Infrastructure Resilience
5. Protect Biodiversity and Enhance Ecosystem Functions
6. Reduce Community Service Disruptions
7. Build Community Resilience

DEGREES OF CHANGE

Climate Change Adaptation Plan

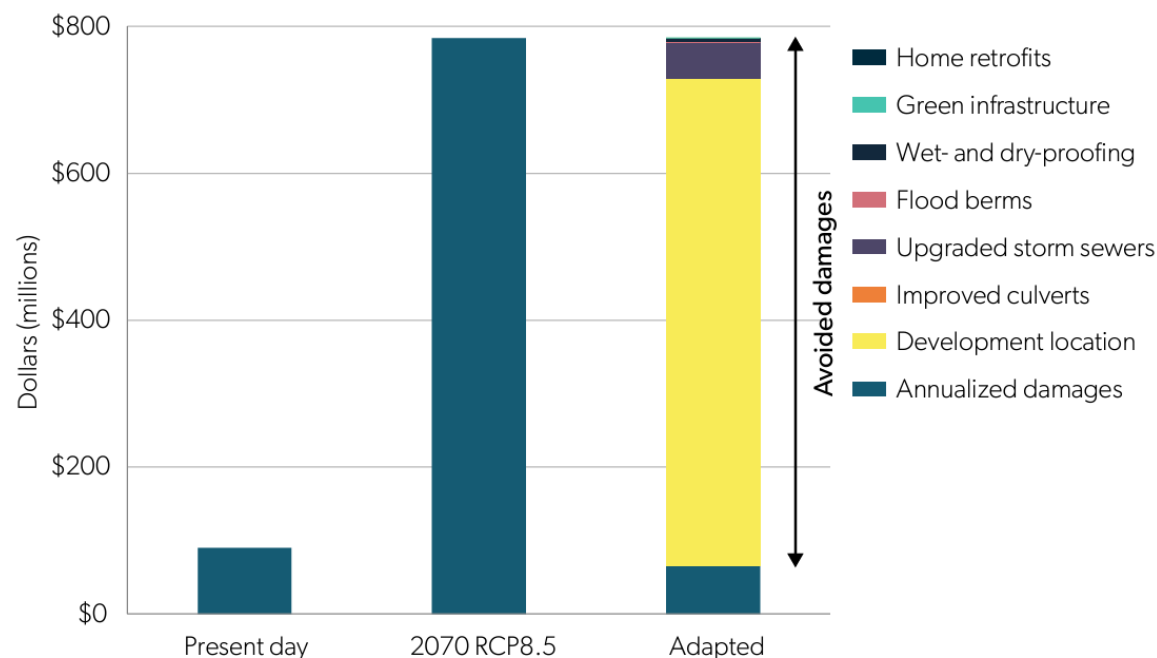
## What has Windsor done to increase chances of success?

- ✓ Clear, detailed set of actions for each objective, with details on policy tools for implementation.
- ✓ **Governance structure and accountability clearly outlined.**
- ✓ Ensure the action plan has resources for implementation.
- ✓ Detailed monitoring including indicators are in place.



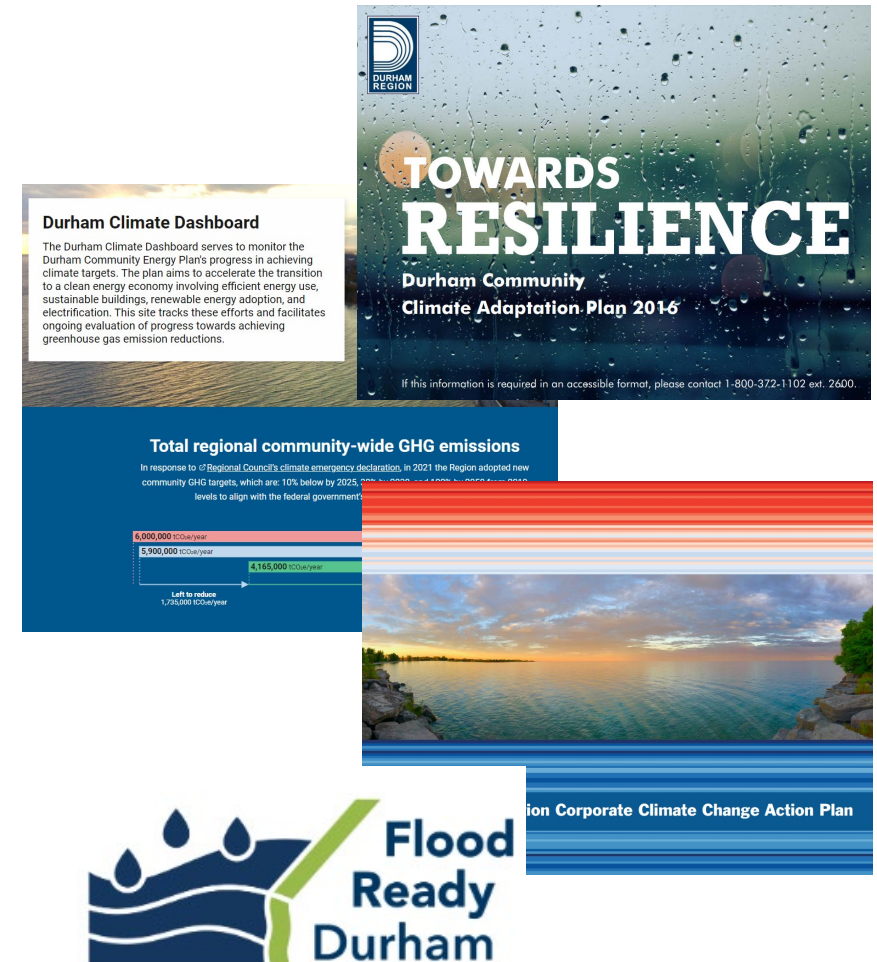
# Example - Whitby Resilience analysis and plans

- Findings: 7-fold increase in financial cost of climate damages by late century
- Successful implementation of range of adaptation measures averts losses.
- Principles
  - Prevent loss before it happens
  - Robust and ready infrastructure
  - Protect people
- Implement!
  - Integrate across decision-making and planning.
  - Adapt infrastructure
  - Protect and restore natural spaces
  - Promote human well-being



# Durham Region Resilience Planning

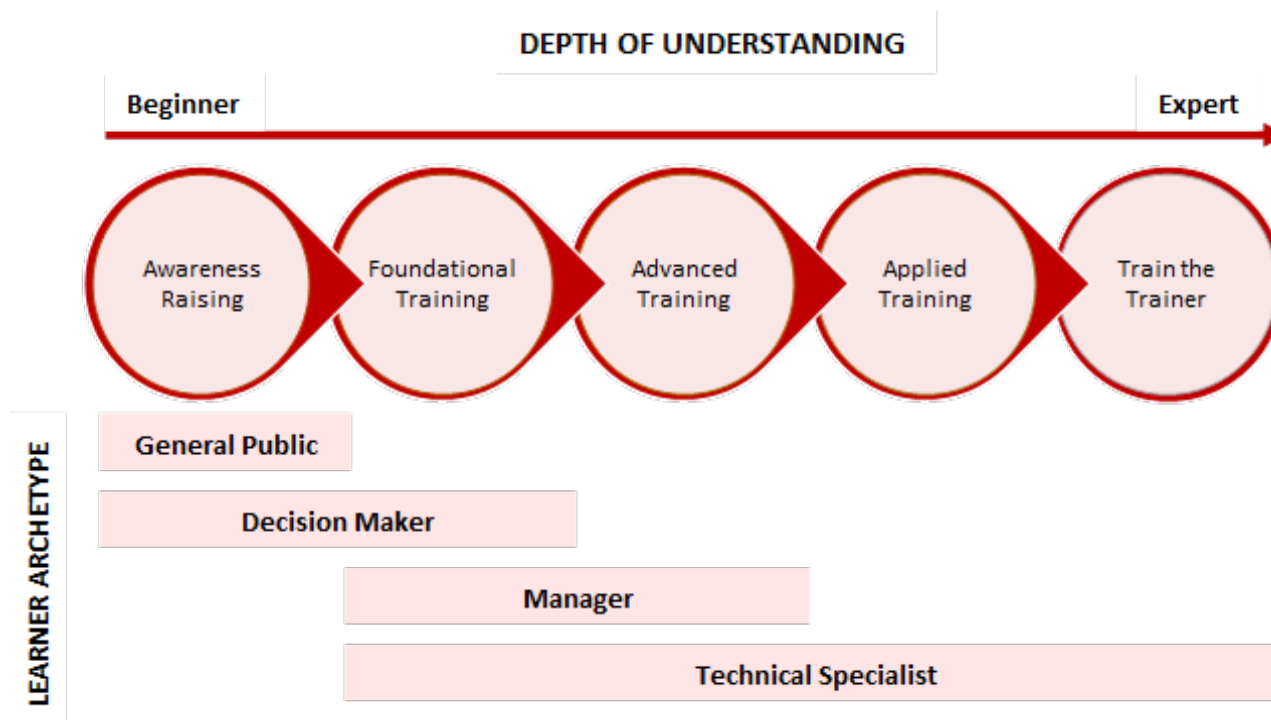
- Durham's regional climate change adaptation work has established knowledge and capacity in the region.
- Comprehensive adaptation plan and sectoral reports (food security, agriculture, managing urban heat, flood preparedness) each document:
  - Climate Impacts and Risks
  - Cross-cutting themes
  - Opportunities to build resilience
- Opportunities to accelerate action:
  - Build on institutional and adaptive capacity
  - Increase coordination across departments, between tiers
  - Continuing 'mainstreaming'
  - **Add resources to match scale of challenge**



# Directions – Knowledge and Skills

## Developing skills and capacity

- ✓ Addressing climate change requires whole-of-government approach
- ✓ Range of competencies needed throughout public (and private) sector.
- ✓ Level of awareness or training needed varies – from general awareness to technical specialists..





# Directions – Implement Solutions!

## Built Environment

- Consider mitigation and adaptation in all regional, local planning and policy
- Compact, walkable to reduce transportation emissions and infrastructure
- Have robust strategies for climate in new plans and developments
- Reduce life-cycle impact and enhanced built and natural system interactions through design
- Facilitate energy conservation and renewable energy

## Natural Environment

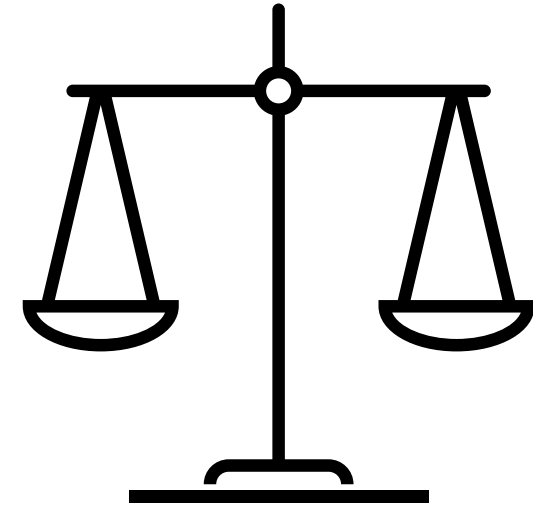
- Adapt infrastructure to changing climate
- Protect and restore water resources
- Protect and restore natural areas and biodiversity – they are vital in adaptation
- Support sustainable food systems

## Social Environment

- Engage to garner support for commitment to reduce climate impacts
- Address health equity and social vulnerability
- Minimize climate impacts on mental health and social health through actions and response
- Integrate local Indigenous knowledge and planning traditions into planning processes, respecting the rights of Indigenous peoples.

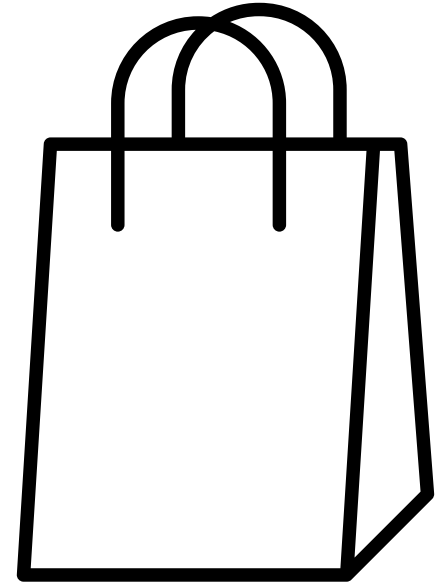
# Legislation and Legal Obligations

- National and provincial level legislation carries climate-related obligations for local and regional governments.
- Liability for climate events ongoing issue for municipal governments.
  - Distinguish between **policy** and **operational** decisions.
- Codes and standards continue to evolve, can be leveraged by municipalities / region.
- For public sector staff – professionals may have distinct professional duties and expectations, and associated liability.
  - E.g., Engineers on staff should reference professional regulators to review expectations related to climate change.



# Take Away Messages

- Climate change impacts nearly everything you do in a region.
- Climate damages are having impact on cost of living **now**; adaptation can limit negative effects later.
- Climate- and risk-informed decision making **now** can avoid **big costs** later.
- Adaptation to climate change should be integrated throughout existing local strategies, policies, plans and bylaws.
- Region and municipalities have many existing policy tools to manage climate change impacts and risks. Coordinate and collaborate with partners and across levels of government.
- Municipalities and regions – including in Durham are taking action – **existing resources and precedents exist**. Don't reinvent solution! – just tailor it to local needs.
- Address the adaptation gap! Need to scale up action!





# Reflection – Revisiting question

- What are your highest priorities in the short-term for your constituents, communities and the region?
- What are your priorities for longer term social, economic, environmental goals for the community?
- Will the impacts of **changing climate** threaten your ability to achieve those objectives or to make progress on those priorities? How?
- How can **building resilience** / proactive **adaptation** help you achieve those objectives?
- What role can you play in support resilience?





# Thank you

April 2024  
Al Douglas  
President, Climate Risk Institute



# Report 2024-COW 12

## 2024 Annual Climate Change Progress Report

Linda Gasser, Whitby  
DYEC - the Elephant in the Room



# Report 2024 COW-12, pages 11 & 12

Figure 4: Corporate GHG Emissions by Operational Area for 2023 (Preliminary Estimate)

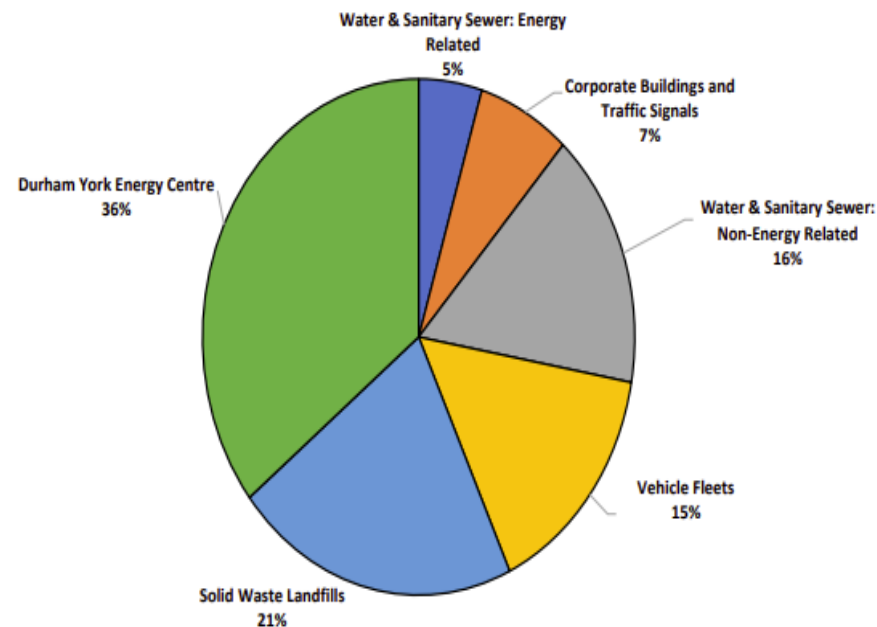
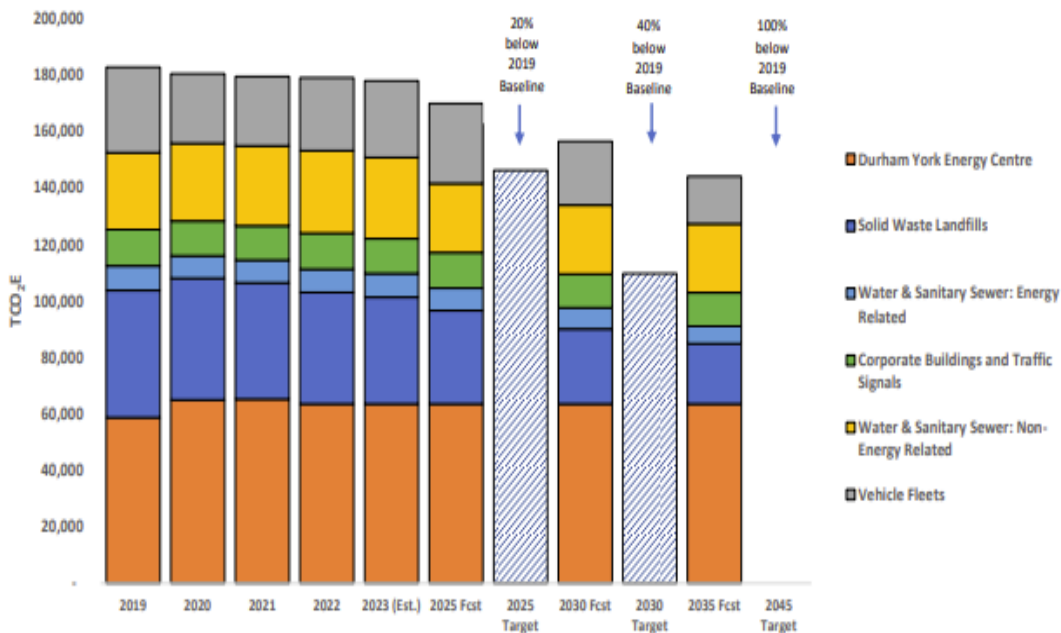
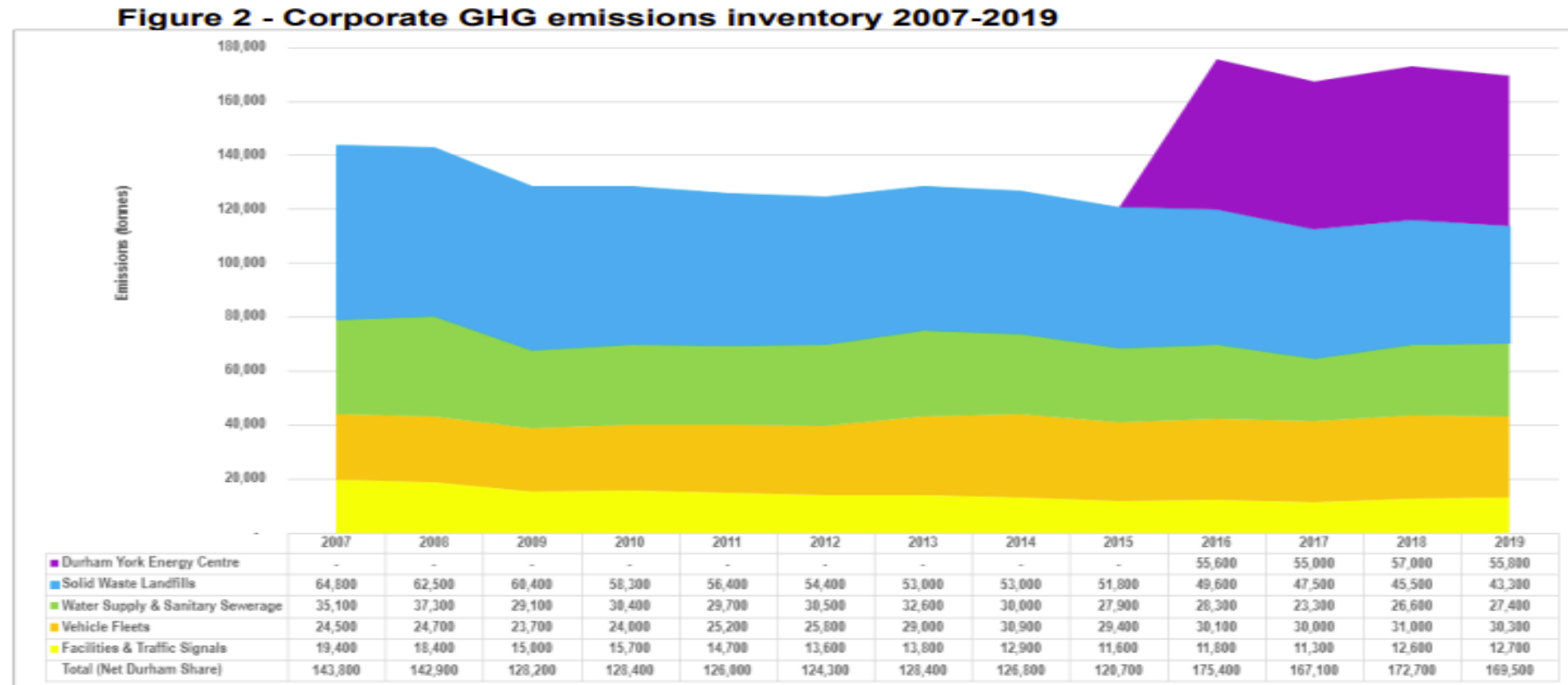


Figure 5: Durham Region Total Corporate Emissions, 2019 to 2023 (Estimated) (MtCO<sub>2</sub>e)



# DYEC's impact on Durham's corp. GHG emissions

Durham report 2021 A-3, Pg 7 Figure 2



NRPI:[https://pollution-waste.canada.ca/national-release-inventory/?fromYear=2022&toYear=2022&name=Durham%20York%20Energy%20Centre&direction=ascending&order=NPRI\\_Id&length=10&page=1](https://pollution-waste.canada.ca/national-release-inventory/?fromYear=2022&toYear=2022&name=Durham%20York%20Energy%20Centre&direction=ascending&order=NPRI_Id&length=10&page=1)



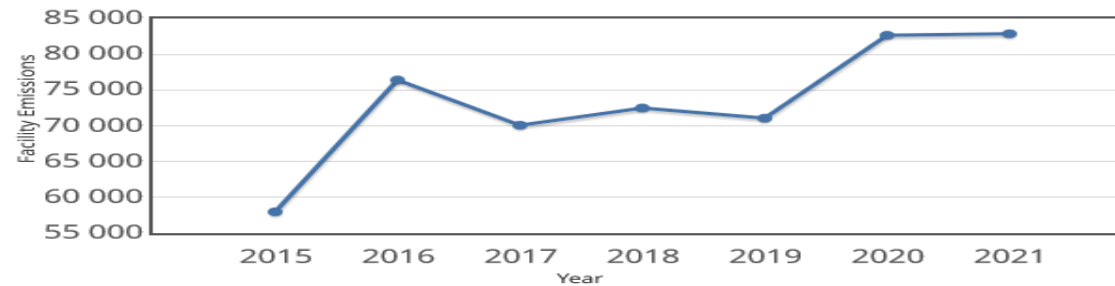
NPRI ID	GHGRP ID	Year	Company	Facility	City	Province	NAICS	Report type
<a href="#">29003</a>	<a href="#">G10805</a>	2022	Covanta Durham York Renewable Energy Limited Partnership	Durham York Energy Centre	Courtice	Ontario	562210	NPRI Inventory



Ask WHY staff assumed constant reportable DYEC GHGs. Need a transparent PUBLIC accounting of all GHG reporting of DR & DYEC  
NRPI: <https://climate-change.canada.ca/facility-emissions/GHGRP-G10805-2022.html?GocTemplateCulture=en-CA&external=true>

#### Annual Reported Emissions

Facility Emissions (tonnes CO<sub>2</sub> eq ) by Year



Facility Emissions (tonnes CO<sub>2</sub> eq ) by Year

Year	Emissions (tonnes CO <sub>2</sub> eq)
2015	57 976
2016	76 404
2017	70 078
2018	72 494
2019	71 070
2020	82 655
2021	82 868

# DYEC – GHG emissions

Report 2024 COW-12 (2023 estimate)

Total DR Corporate: 178,000 TCO<sub>2</sub>e  
Staff claim DYEC = 36% total corp.

64,080 T

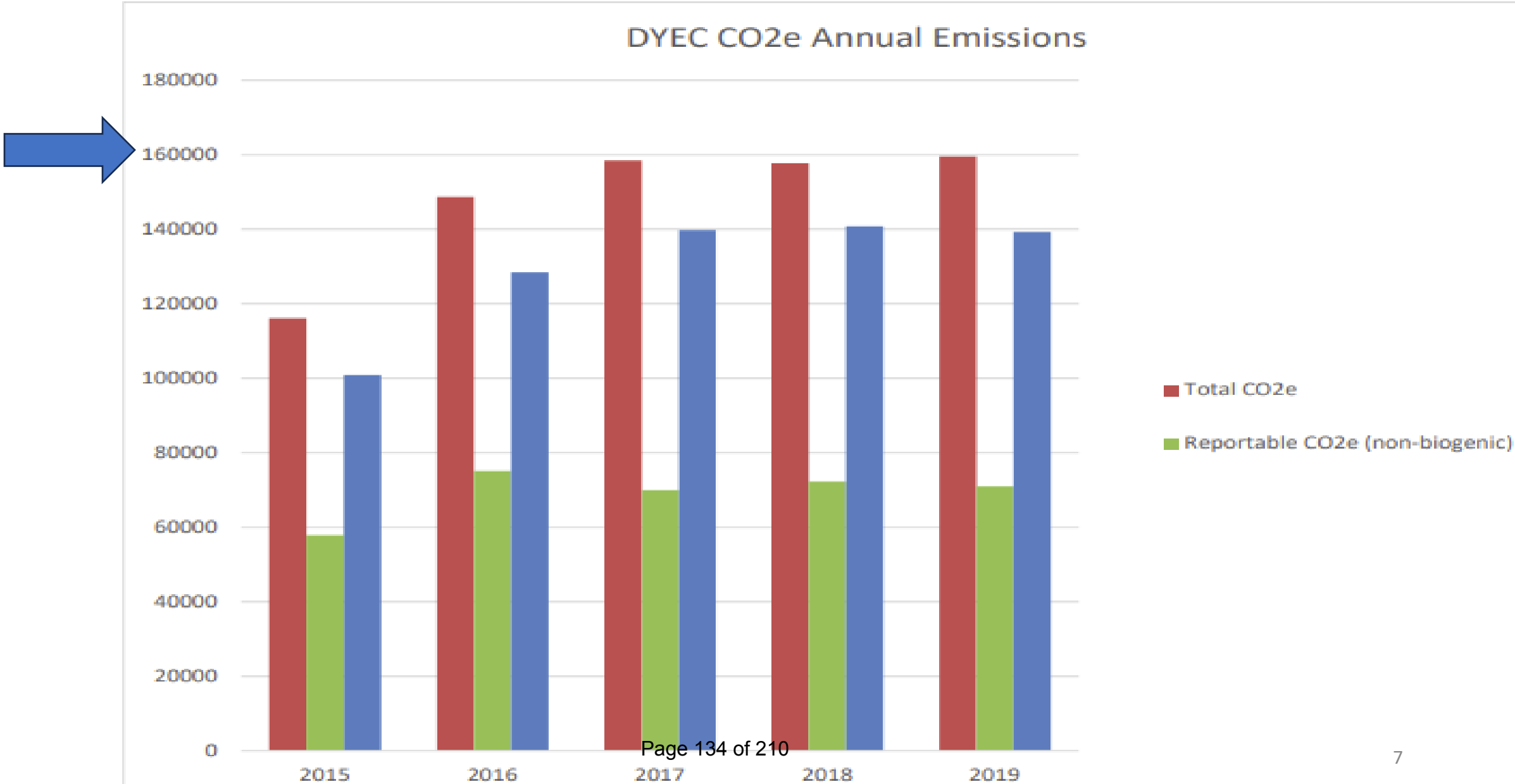
Durham’s 78.6% of 2019 TOTAL  
DYEC GHGS at 140K tpy = 125,402

Dec. 2021 DYEC Env. Screening Report  
re 2019 GHGs Page 60

from DYEC

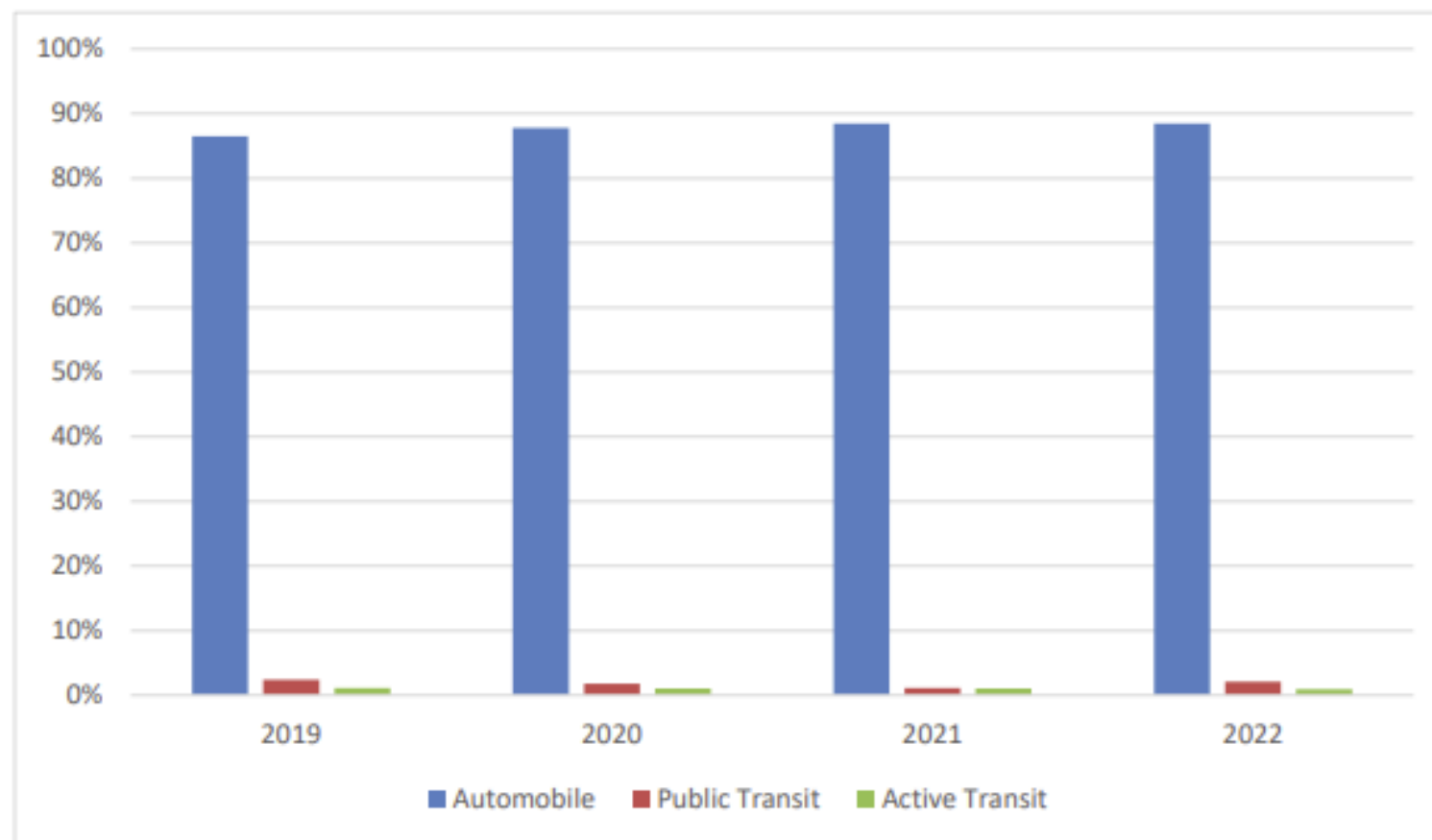
DYEC (Tonnes Processible)	GHG Contribution (tonnes CO <sub>2</sub> eq)
140,000	159,545
160,000	182,337

Figure 3: A summary of the DYEC CO2e Annual Emissions from 2015-2019





**Figure 3: Durham Region – Percentage of total trips per mode<sup>1</sup>**



- b. The Region has a critical role to play in enabling low carbon mobility through public transit service, and through investment in active transportation infrastructure through the Regional Cycling Plan, including strengthening its Transportation Demand Management (TDM) offerings and policies under its Smart Mobility Durham program.

# DYEC is the elephant in the room

- Council needs to get a clear accounting of DYEC's GHG emissions.
- If capacity increased to 160K tpy **total** DYEC GHGs = approx. 80% of 2023 total corp. GHGs
- Over \$200 million federal gas tax dollars SQUANDERED on Durham's 78.6% share of DYEC
- DYEC is NOT a low carbon source of energy. You can't burn your way to a low carbon future.
- Durham's foray into District Energy reliant on DYEC steam/heat is ridiculous and wasteful greenwashing.
- Only after ALL essential priorities like transit, public housing & homelessness supports & essential infrastructure are met, should you consider District Energy.

# Climate Change is a Human Rights Issue

- IF Durham is serious about reducing corporate GHGs, council should immediately cancel the staff proposed DYEC capacity increase from 140,000 tpy to 160,000.
- Works Committee must get serious about strategies to REDUCE garbage tonnage.
- Transit GROSSLY UNDERFUNDED for decades including in 2024 budget
- Priority should be increase \$\$ to transit which improves affordability,/quality of life & Region's economic prosperity while REDUCING Community GHGs and air pollution.
- <https://www.cbc.ca/news/world/european-human-rights-court-climate-1.7167866>

*The European Court of Human Rights (ECHR) ruled on Tuesday in favour of a group of elderly Swiss women who had argued that **their government's inadequate efforts to combat climate change put them at risk of dying during heat waves....** She also noted the Swiss government had failed to meet its past greenhouse gas emission reduction targets, by not putting in place measures to ensure the goals were achieved.*

BC's 2021 Heat Dome- 619 deaths: <https://news.gov.bc.ca/releases/2022PSSG0035-000911>

Thank you for your attention. QUESTIONS?



If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3802.



# The Regional Municipality of Durham Report

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To: Committee of the Whole  
From: Chief Administrative Officer  
Report: #2024-COW-12  
Date: April 10, 2024

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## **Subject:**

2024 Annual Climate Change Progress Report

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## **Recommendations:**

That the Committee of the Whole recommends to Regional Council:

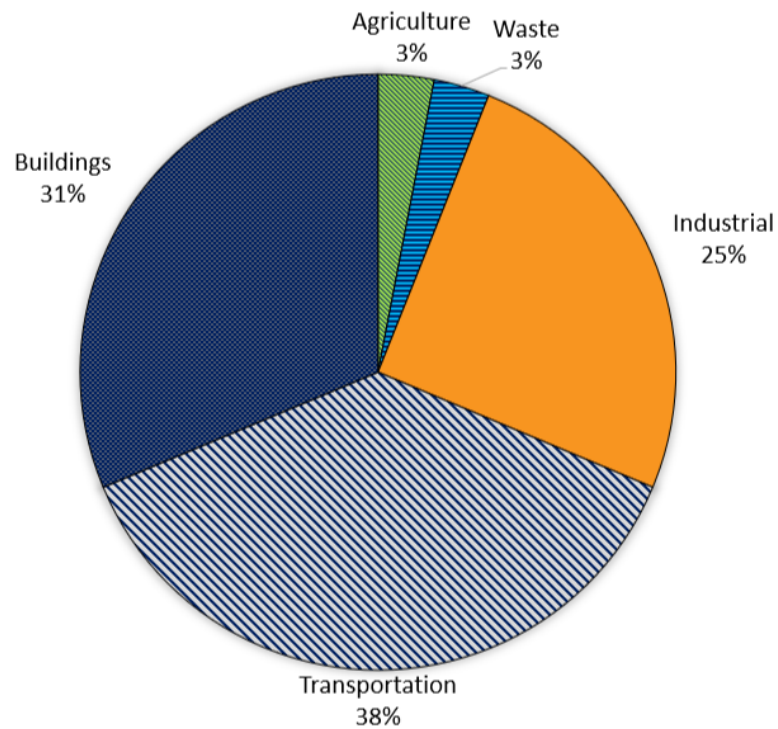
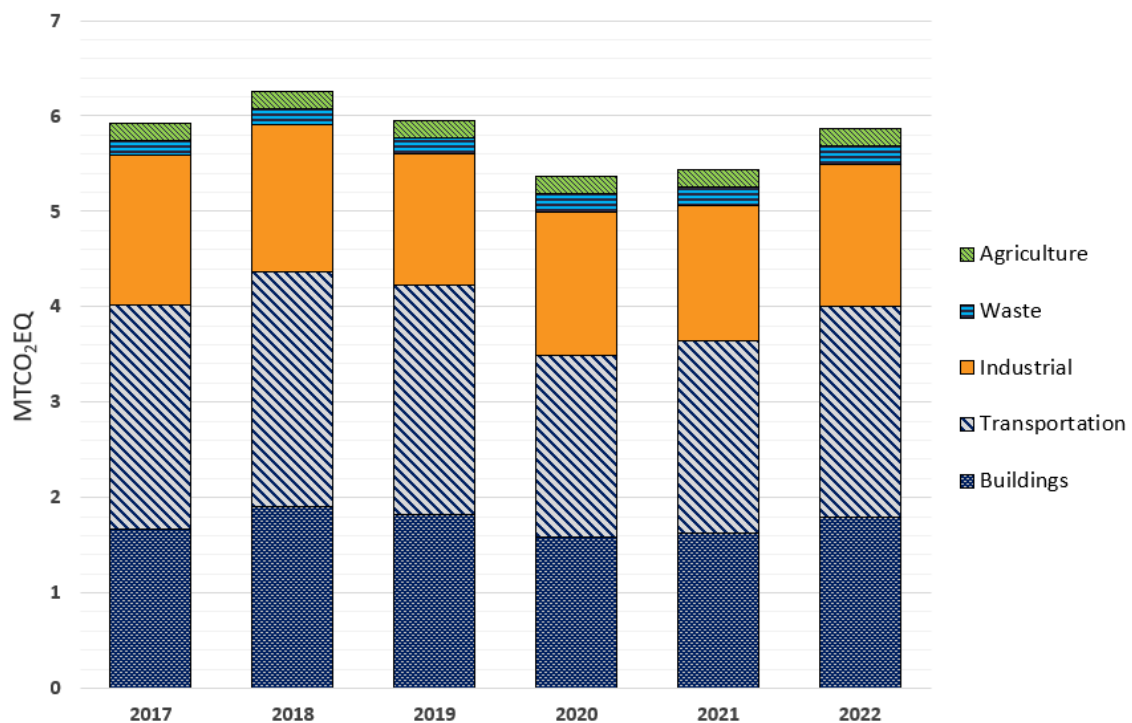
- A) That Regional Council receive this 2024 Climate Change Progress Report for information; and
  - B) That a copy of this report, be sent to all Durham MPs and MPPs, local area municipalities, Conservation Authorities, and local energy utilities, for their information and consideration.
- 

## **Report:**

### **1. Purpose**

- 1.1 Leadership on climate change and sustainability is a key strategic priority for the Region, as reflected in the Region's strategic plan as well as within the new Council adopted Regional Official Plan. Regional Council's declaration of a climate emergency in January 2020 was a key decision point supporting the focus on climate action as a critical priority guiding municipal policy, investment, and operations. This annual climate change progress report provides a status update on the implementation of climate action plans endorsed by Regional Council.
- 1.2 Section 2 of this report provides an update on the [Durham Community Energy Plan](#) (DCEP). The DCEP was [endorsed](#) in principle by Regional Council and local area municipal councils in 2019 and outlines Durham's pathway to reduce greenhouse gas (GHG) emissions and facilitate the transition towards a clean energy economy through collaboration between the Region, local area municipalities, energy utilities, and other community stakeholders.

- 1.3 Section 3 of this report provides an update on the [Durham Region Corporate Climate Action Plan](#) (CCAP). The CCAP was endorsed by Regional Council in 2021 ([Report #2021-A-3](#)) and provides a framework for corporate decarbonization, including GHG reduction targets, and integration of a climate lens into the Region's business planning and budgets process. The CCAP was developed in collaboration with internal departments and operating divisions.
- 1.4 Section 4 of this report provides an update on the [Durham Community Climate Adaptation Plan](#) (DCCAP). DCCAP was endorsed by Regional Council in 2016 ([Report #2016-COW-103](#)) and sets out a vision, goals, and actions to help Durham Region adapt to climate change impacts. This plan was developed in collaboration between the Region, local municipalities, Conservation Authorities, energy utilities, and other local stakeholders.
- 1.5 **This is the fourth such annual climate progress report since Regional Council's 2020 climate emergency declaration. Previous annual climate update reports can be found on the [Region's website](#).**
2. **Durham Community Energy Plan (DCEP) Update**
- 2.1 Durham Region community-wide carbon emissions inventory update:
  - a. In late 2023, The Atmospheric Fund (TAF) published its annual [carbon emissions inventory report](#) for the Greater Toronto and Hamilton Area (GTHA). The report covered 2022 carbon emissions data across the four regional municipalities (Halton, Peel, York, and Durham) and single tier municipalities (Hamilton and Toronto) that make up the GTHA. TAF estimated that GTHA emissions increased annually by 8 per cent in 2022, which was the largest annual increase since 2015. Emissions increased across all six jurisdictions covered by the report, ranging from 5 per cent in Hamilton to 12 per cent in Halton Region. Carbon emissions in the GTHA will need to decrease by 9 per cent annually to reach 2030 targets in line with achieving net zero emissions by 2050.
  - b. Durham Region's emissions, as reported by TAF, and based on total activity within Durham's geographic boundaries, increased by 8 per cent in 2022 to 5.9 million tonnes of carbon dioxide equivalent (TCO<sub>2</sub>e), nearly reaching pre-pandemic levels (see Figure 2 below). The transportation sector was the biggest driver for this increase, up 9 per cent, and continues to be the largest source of GHG emissions overall in Durham Region (see Figure 2: Durham Region Total Community Emissions, 2017-2022 (MtCO<sub>2</sub>e)
  - c. below). The report acknowledges that most of the GTHA's agricultural activity is concentrated in Durham, making up 3 per cent of Durham's total emissions, and that food grown in Durham is consumed by communities across Ontario and beyond.

**Figure 1: 2022 Durham Community GHG Emissions by Sector (MtCO<sub>2</sub>e)****Figure 2: Durham Region Total Community Emissions, 2017-2022 (MtCO<sub>2</sub>e)**



2.2 The Region continues to support the implementation of the DCEP in partnership with local area municipalities, energy utilities, and other organizations with influence over energy use and emissions in the community. Updates across key areas of the DCEP low carbon pathway are provided below.

2.3 **Existing Home Energy Retrofits**

- a. DCEP called for deep energy retrofits across all the roughly 200,000 existing single-family homes in Durham Region to align with a low carbon pathway to 2050. Achieving this goal requires a tripling of the rate of home energy retrofits, with each retrofit including both envelope upgrades (e.g., insulation) as well as upgrades to heating and cooling systems (e.g., switching from natural gas furnaces to electric air source heat pumps).
- b. The [Durham Greener Homes](#) (DGH) program was launched in April 2022 to provide residents with a comprehensive voluntary residential retrofit program to achieve energy efficiency upgrades and deep energy retrofits. The program includes expert energy coaching services, tailored incentives, and third-party financing services.
- c. To date, more than 1,000 Durham Region homes have registered to participate in the DGH program, and of those, close to 100 homes have completed a deep energy retrofit. In April 2024, the DGH program will be enhanced with the launch of a virtual home energy audit tool (VHEAT) that will enable insights into the energy performance of all 200,000 homes across Durham Region. The Region is working with its contracted program administrator, Windfall Ecology Centre, to implement a direct marketing campaign to invite homeowners to register through the secure DGH portal to access their VHEAT report and begin their retrofit journey. This will be supported by tailored incentives administered by the Region with the support of FCM Community Efficiency Financing Program grant funding.
- d. As outlined in Section 4.4 below, Regional staff are also working to develop an enhancement to the DGH program that will focus on supporting homeowners with implementing climate resilience retrofits that can address risks associated with flooding and extreme heat impacts. A full update to Council on the DGH program, including planned enhancement, is expected in Q2 2024.

2.4 **Existing Building Retrofits – Industrial, Commercial, Institutional, and Multi-Unit Residential Buildings.**

- a. In addition to single family homes, DCEP's low carbon pathway includes deep retrofits in all existing industrial, commercial, institutional, and multi-unit residential buildings in the Region.

- b. The [Durham Greener Buildings](#) (DGB) program launched in January 2024 to support building owners and managers in complying with the Province of [Ontario's Energy and Water Reporting and Benchmarking \(EWRB\) Initiative](#). The program seeks to build capacity around benchmarking by providing a Help Desk and training support services to build familiarity, among building owners with Energy Star Portfolio Manager (ESPM), and in turn, drive demand for energy efficiency improvements throughout the building sector.
- c. The Durham Greener Buildings program complements and expands on the Durham Greener Homes program and will include a focus on supporting benchmarking and disclosing energy and water usage data of municipally owned buildings to showcase local government leadership in addressing climate change. Additionally, the program facilitates compliance with [Broader Public Sector \(BPS\) reporting requirements](#). In subsequent steps, staff will explore financing and funding opportunities while collaborating with partners to facilitate deep energy building retrofits. For further program details, please refer to report [#2023-COW-16](#).

## 2.5 New Construction – Durham Green Development Program

- a. Given expected population growth in Durham Region, and the associated need to build thousands of new homes annually over the coming decades, the DCEP identifies high energy performance in new building construction as a critical piece of Durham's low carbon pathway. Specifically, the DCEP calls for local municipalities to implement a tiered set of energy and emissions performance standards through the planning approval process, with the first tier mandatory and upper tiers of energy and emissions performance standards voluntary, supported by incentives.
- b. Local area municipalities, including [Town of Whitby](#), [City of Pickering](#), and [Town of Ajax](#) (the municipalities), have implemented green development standards since the DCEP was endorsed. These standards include a tiered set of energy and emissions performance criteria.
- c. While the provincial government's Bill 23 initially appeared to limit the ability of municipalities to implement green development standards, subsequent amendments as outlined in a [Letter from the former Minister of Municipal Affairs and Housing, Steve Clark](#), recognize the important work being done by municipalities through green development standards. The Minister's letter further articulated that the Province intends to consult with municipalities and other stakeholders on a consistent province-wide approach for municipalities wanting to implement green building standards that are above the minimum requirements in the Ontario Building Code (OBC) although to date, such consultations have not yet occurred.

- d. As part of the implementation of the [Pan Canadian Framework on Clean Growth and Climate Change](#), the federal government has moved forward with a National Building Code that includes energy performance tiers that are designed to move the building industry to net zero by 2030. As part of the code harmonization process, the Province of Ontario is updating the OBC to align with National Codes. There is an emerging need for market transformation to align with the tiered approach.
- e. The Region has focused on industry training and capacity building initiatives in collaboration with the Durham Region Home Builders' Association (DRHBA), and Natural Resources Canada's (NRCan) Local Energy Efficiency Partnerships (LEEP) team. Together with DRHBA and LEEP, the Region hosted a series of technology forums for builders and developers that are focused on high performance new construction. These sessions are continuing into Q2 2024.
- f. In 2023, Regional staff began working to develop a Green Development Program with an aim of:
  - building alignment amongst local municipal green development standards the new national model energy code tiers, and with forthcoming changes to the OBC; and
  - supporting voluntary adoption of higher energy performance tiers.
- g. The program development process has included evaluating policy tools to enhance energy performance and reduce GHG emissions in new residential construction, and collaboration with local municipalities and cross-departmental municipal staff teams, including Finance and Planning. Staff have consulted with energy utilities and building industry stakeholders through focus group sessions. Staff anticipate bringing forward a comprehensive program proposal to Regional Council in mid-2024.

## 2.6 Low Carbon Thermal Networks – Sewer Heat Recovery/District Heating.

- a. The DCEP identifies district energy (DE) as a key strategy for building sector decarbonization in Durham Region, which can potentially contribute more than 15 percent of GHG emissions reductions to meet the 2050 target.
- b. Exploration of DE opportunities have initially focused on Courtice given the availability of heat from the Durham York Energy Centre (DYEC) and the planned high population and employment densities around the Courtice GO Station Major Transit Station Area (MTSA). A preliminary business case analysis was developed in 2023, and presented to Council in January 2024 in Report [#2024-COW-1](#). Following Council endorsement in principle of the DES project concept for the Courtice Transit-Oriented Community (CTOC), staff are evaluating service delivery model options for the Courtice district



energy system, as well as updating the preliminary business case. A report outlining the recommended next steps is expected to be presented to Council in Q3 2024.

- c. In addition to work to evaluate district energy in Courtice, the Region is working with Brookfield Residential and energy developer Creative Energy to determine the feasibility of utilizing thermal energy from the Region's sanitary sewer system to meet most of the space heating and cooling requirements of the Dockside Development in the Port of Whitby. Staff are currently undertaking the final round of consultations and will develop the required Memorandum-of-Understanding (MOU) and the necessary agreements. For further details, please refer to report [#2022-INFO-16](#).
- d. Staff will initiate an assessment of DE opportunities across strategic growth areas outlined in the Regional Official Plan as part of an overarching, comprehensive thermal energy demand mapping effort for the Region, in collaboration with local area municipalities and energy utilities.
- e. Given the relatively new nature of DE work in Durham Region, the projects will help inform the development of future policies, standard agreements, and protocols to support the pre-screening, review and approval of district energy and waste energy transfer projects.

## 2.7 Electric Vehicle Adoption

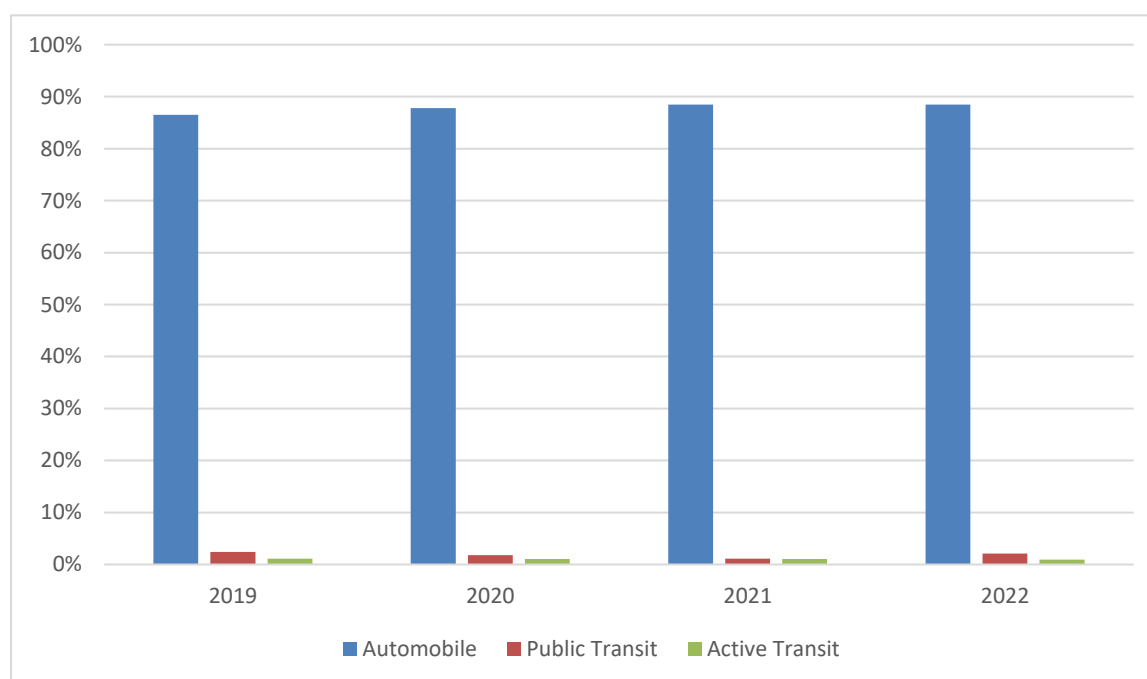
- a. The DCEP points to the transportation sector as a key area of focus, where electric vehicle (EV) adoption to reduce gasoline and diesel fuel use, will help to drive GHG reductions across Durham. As part of a multi-faceted approach to encourage the uptake of EVs across Durham, the Region, in collaboration with local municipalities and other public sector organizations have proceeded with the implementation of EV charging stations to support public and corporate fleet charging activities.
- b. To date, the Region has led on four collaborative proposals to NRCan for funding under the Zero Emissions Vehicle Infrastructure Program (ZEVIP) to support the implementation of EV chargers. Collaborative applications have been developed in partnership with local area municipalities, the Durham Catholic District School Board (DCDSB), Trent University Durham GTA, Oshawa Power and Utilities Corporation, and Central Lake Ontario Conservation Authority (CLOCA). In total, the Region secured \$ 2.7 million in approved grant funding to cover up to 50 per cent of eligible project costs related to the implementation of over 360 EV chargers to support public charging and corporate fleet applications.
- c. The installation of EV charging infrastructure plays a key role in stimulating consumer demand for EVs. In 2022, Durham experienced a surge in EV purchases compared to 2021, with 3,707 EVs (an increase of 80 per cent

over 2021) and 1,402 plug-in hybrid vehicles (PHEVs) (an increase of 34 per cent over 2021).

## 2.8 Public and Active Transportation

- a. Low carbon mobility options such as public and active transit are important for aligning community-wide carbon reduction outcomes with other priorities like community health, well-being and cost-of-living. As shown in Figure 3 below, the automobile remains the dominant form of transportation in Durham Region representing close to 90 per cent of total trips taken in 2022 (the latest year for which data is available). Auto mode share increased over the period from 2019 to 2022, with a commensurate decline in the share of trips taken by public transit and active modes. Transit did show an increase between 2021 and 2022, reflecting resumption of normal services from the COVID pandemic.

**Figure 3: Durham Region – Percentage of total trips per mode<sup>1</sup>**



- b. The Region has a critical role to play in enabling low carbon mobility through public transit service, and through investment in active transportation infrastructure through the Regional Cycling Plan, including strengthening its Transportation Demand Management (TDM) offerings and policies under its Smart Mobility Durham program.

<sup>1</sup> Source: Google Environmental Insights Explorer – Transportation Activity Data for the Regional Municipality of Durham. Available here: <https://insights.sustainability.google/places/ChIJNWdhIINO1YkR3unhOZ62X88?hl=en-US&ty=2022>

- c. In the fall of 2023, Durham Region Transit (DRT) saw record ridership levels which exceeded pre-pandemic levels. This was achieved despite a lower overall amount of service hours delivered by DRT in 2023 as compared to 2022 (~roughly 480,000 service hours in 2023 vs close to 590,000 service hours in 2022). Section 3.6a below provides additional information on planned investment to support increased transit service alongside bus fleet electrification.
- d. Through implementation of the Regional Cycling Plan (RCP) the Region continues to advance the installation of new cycling infrastructure. Since the adoption of the 2021 RCP, the Region has built approximately 52 kilometres (km) of cycling infrastructure for a total of approximately 121 km of regional cycling facilities. The 2024 budget approved funding for the construction of approximately 19 km of cycling infrastructure to be implemented as part of Regional Roads construction projects and \$0.9 million to advance shovel-readiness of cycling network infill projects.

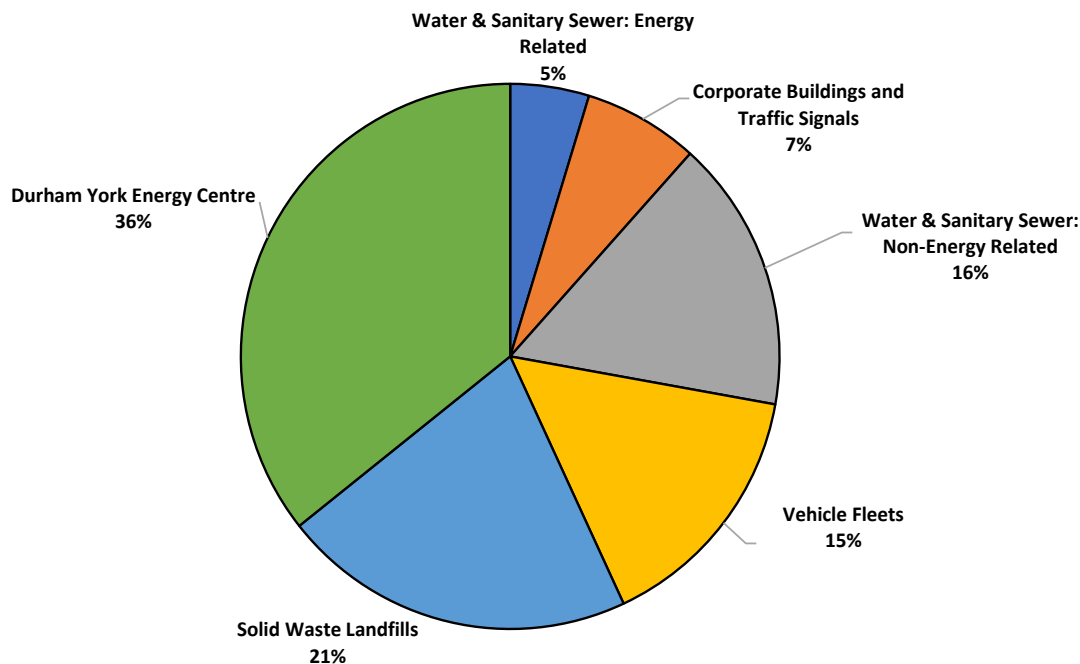
## 2.9 Climate Governance and Public Reporting

- a. In addition to taking critical steps in advancing climate initiatives, the Region also undertook efforts to enhance community advisory capacity, and public facing communications on progress, as outlined below.
- b. **Durham Climate Roundtable (DCR)** – In 2023, the Durham Region Roundtable on Climate Change (DRRCC) advisory committee was integrated with the Durham Environmental Advisory Committee (DEAC), and a new arms-length Durham Climate Roundtable (DCR) was created, coordinated by Ontario Tech University. The DCR serves as a leadership accelerator, with membership representing diverse sectors across Durham Region, including regional and local government, corporate entities, and community organizations. The objectives of the DCR include providing advice to the Region of Durham on climate change matters and conducting climate change awareness and outreach activities. DCR member responsibilities include reviewing the annual DCR Report, participating in an annual Climate Forum, endorsing identified priorities for action by implementation teams, and acting as champions for climate action priorities within respective organizations, networks, and communities. For further details, please refer to report [#2022-COW-28](#).
- c. **Annual Durham Climate Forum** - the [Durham Climate Roundtable](#) (DCR) hosted the inaugural Durham Environment and Climate Forum on November 14<sup>th</sup>, 2023. The event showcased progress on climate action and celebrated the accomplishments of environment and climate change leaders across Durham Region. Staff are working with the Brilliant Energy Institute (BEI) and Ontario Tech University to deliver the upcoming annual climate forum, scheduled for fall 2024.



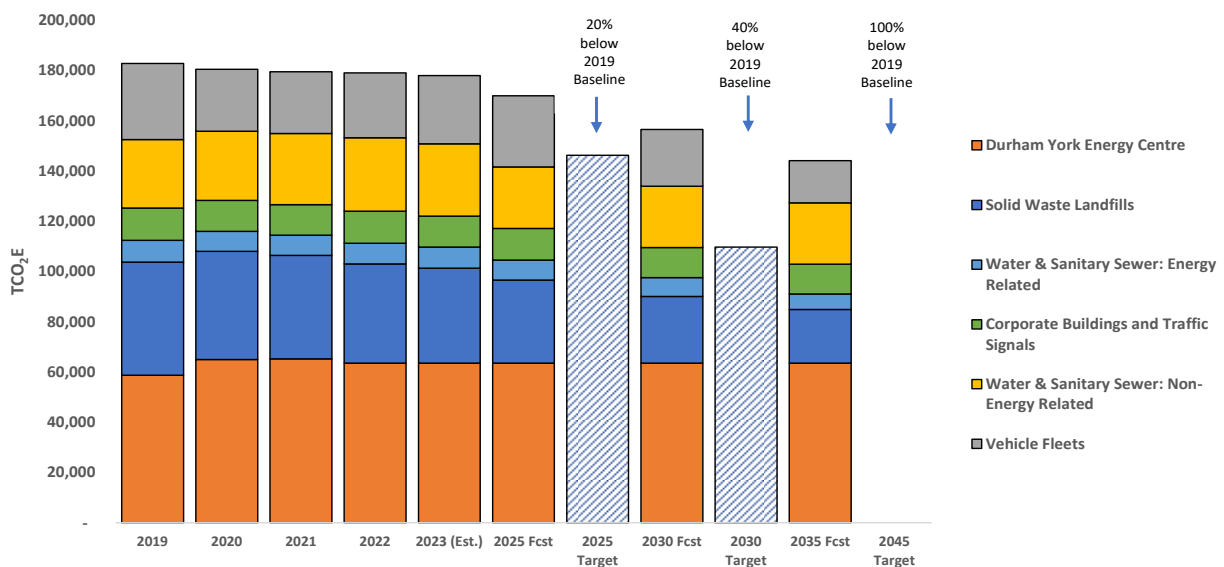
- d. **Durham Climate Dashboard** - The [Durham Climate Dashboard](#), formally launching later in April 2024, is an online platform designed to monitor the DCEP's progress in achieving the Region's climate targets. The dashboard displays local energy and emissions data and enables community members to see the progress and impact of climate action initiatives undertaken by the Region and area municipalities, and visually track the outcomes and impact of these actions.
3. **Durham Region Corporate Climate Action Plan Update – Leading by Example**
    - 3.1 Regional Council approved the [Corporate Climate Action Plan](#) (CCAP) in 2021 in support of municipal leadership in the community-wide transition to net zero and climate resilience. Key elements of the CCAP include GHG emission reduction targets for Regional operations, and a system to track, forecast and report progress annually against those targets to senior leadership and Regional Council.
      - 20 per cent GHG emissions reduction by 2025, below 2019 levels,
      - 40 per cent GHG emissions reduction by 2030, below 2019 levels, and
      - 100 per cent GHG emissions reduction by 2045, below 2019 levels.
    - 3.2 **Durham Region corporate GHG emissions inventory update:**
      - a. Durham Region's corporate emissions include energy consumption in regional buildings, vehicles, and infrastructure (e.g. water, wastewater, and solid waste management), as well as non-energy GHG emissions associated with the Region's solid waste management (closed landfill and DYEC emissions) and wastewater operations (process fugitive emissions).
      - b. Based on preliminary estimates, 2023 corporate GHG emissions were approximately 178,000 tonnes (tCO<sub>2</sub>e, rounded), which represents a 1 per cent decrease from 2022 totals. Non-energy related emissions in solid waste management and wastewater treatment operations continue to represent the largest share of total corporate emissions.
      - c. For other corporate operating areas, GHG emissions are largely associated with fossil fuel consumption in fleets from gasoline and diesel fuel whereas GHG emissions in corporate buildings are largely related to natural gas use for space and water heating in buildings. Energy-specific emissions for which the Region is directly responsible for billing was approximately 27 per cent of the corporate totals (based on 2023 estimates and net of the York Region estimated share of Duffin Creek WPCP).

**Figure 4: Corporate GHG Emissions by Operational Area for 2023 (Preliminary Estimate)**



- 3.3 Progress in implementing the CCAP and aligning with Council-endorsed GHG reduction targets have been hindered by the extraordinary challenges facing the Region through the COVID-19 pandemic, ongoing supply chain constraints, and inflationary economic conditions. The Province of Ontario's Bill 23, passed in November 2022, added to these fiscal challenges through sweeping changes to regional land use planning and municipal financing that will place a greater burden on existing property taxpayers and ratepayers to cover the cost of future infrastructure for new community areas. In addition, the Region's corporate emissions profile includes complex emissions sources in solid waste management and wastewater treatment for which technology options are currently limited.
- 3.4 Figure 5 provides a projection of anticipated GHG reductions over the forecast period based on information contained within departmental 10-year capital plans. Based on current information and assumptions, large shares of the reductions are expected to be realized through fleet operations, including the planned electrification of transit service and through the natural decline of methane generation in closed landfills. As reported in 2022, there remains a significant gap between forecasted emissions, and Council endorsed corporate GHG reduction targets. As the findings and recommendations of the GHG Emission Reduction Pathways studies and Water & Wastewater GHG Management Strategy are developed and finalized, forecast estimates will be updated.

**Figure 5: Durham Region Total Corporate Emissions, 2019 to 2023 (Estimated) (MtCO<sub>2</sub>e)**



### 3.5 Corporate Buildings

- a. Corporate buildings (owned and leased facilities, excluding water and sanitary sewer vertical infrastructure) and Regional traffic signals represent seven per cent of total corporate GHG emissions, but a much larger share of the energy-related emissions at just over 25 per cent. With buildings representing the second largest source of emissions community-wide, Regional action in this area is important to demonstrate corporate leadership. Furthermore, with Regional buildings often providing front line services to vulnerable residents (e.g. long-term care homes, childcare centers, and social housing), investments to support climate resilience are critical.
- b. With the adoption of the [Durham Standard](#) in April 2023, all Regionally-owned and operated buildings will be constructed, renovated, retrofitted or expanded to a corporately approved building standard that aligns with the Strategic Plan and CCAP. Specific to corporate climate action, the Durham Standard sets a zero GHG design target and mandates that there is no on-site combustion of fossil fuels (excluding backup power fuel requirements).
- c. The Region has a number of corporate decarbonization projects underway:
  - Traffic Operations /Health Protection at 101 Consumers Dr. (Whitby): deep retrofit will lead to the phase out of on-site fossil fuel consumption.
  - Durham Region Local Housing Corporation (DRLHC) deep retrofits at 155 King St. E. (Oshawa) and 655 Harwood Ave. S (Ajax): include



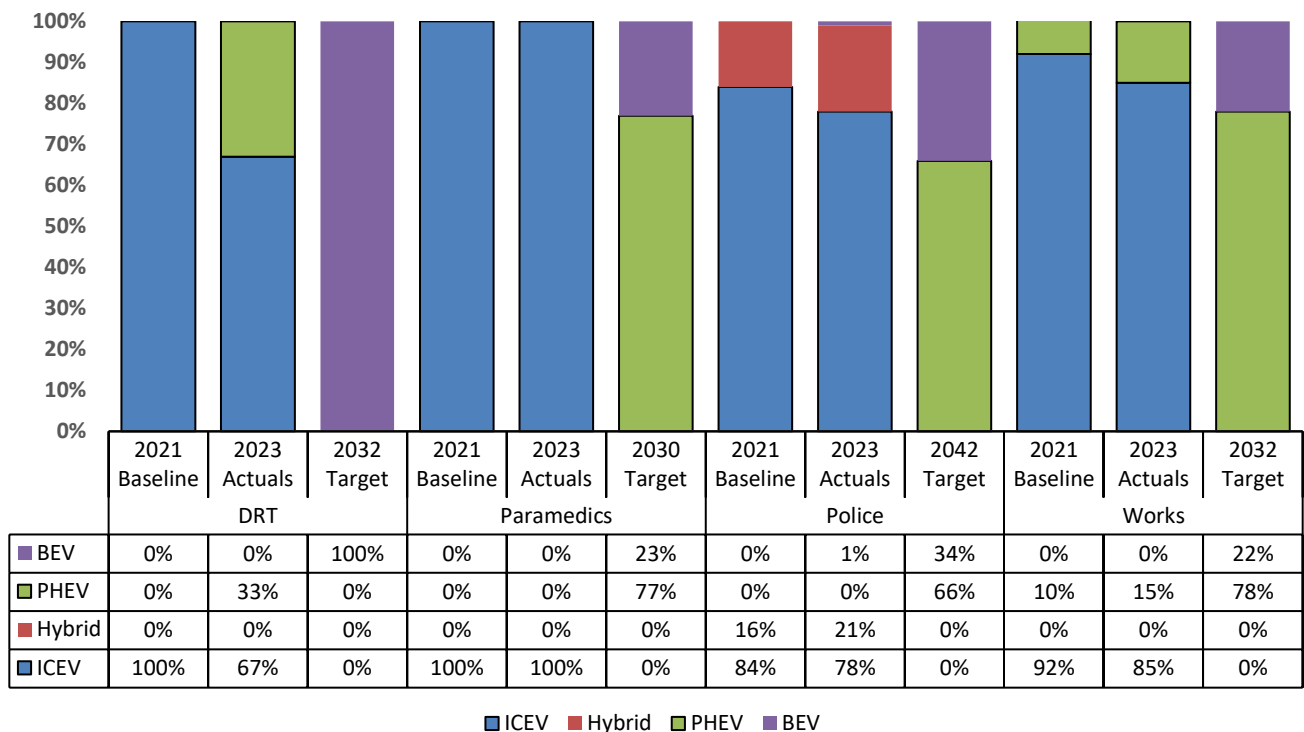
improved building envelopes and upgrades to building heating, cooling, and ventilation systems.

- Seaton Region of Durham Paramedic Services (RDPS) Station and Training Facility (Pickering): includes a geothermal system that will provide heating and cooling for the building and a solar photovoltaic (PV) system that will contribute to making this a zero-carbon building. This new build project is expected to be completed by the year end 2024.
  - Beaverton Transitional Supportive Housing Facility (Brock): all electric building systems and a rooftop solar PV system which will offset approximately 50 per cent of the building's electrical consumption.
  - Seaton Long Term Care (Pickering): is the first new building to be designed following adoption of the Durham Standard. As outlined in Report #2023-COW-34, the building will be 25 percent more efficient than OBC and future upgrades will be required to retrofit the building to meet the Region's target of net zero by 2045.
  - Clarington Police Complex Phase 2 (Clarington): is currently under construction and designed to include a geothermal field for heating and cooling. With DRPS requiring emergency redundancy for operations, natural gas will remain on site as a backup system.
  - DRT Thornton Rd. Transit Maintenance Facility (Oshawa): this project is in the early design phase with a goal of net zero GHG emissions. Design and issuance of the tender is planned for fall 2024, with construction beginning in early 2025 subject to the federal government's approval of the Regional funding application under the Zero Emissions Transit Fund.
- d. In addition to retrofit projects underway, staff are advancing the development of GHG Emission Reduction Pathways studies for all Regional buildings. Once complete at the end of 2024, measures recommended through these studies will be integrated into the 10-year capital plan and implemented through the annual budget process.

### 3.6 Corporate Fleet

- a. Corporate fleet vehicles made up 15 per cent of overall corporate emissions in 2023 but more than half of energy-related emissions. With transportation representing the largest share of community wide emissions (see **Figure 1**), action to reduce its fleet GHG emissions can serve as a leadership example for other public and private sector organizations.

- b. Regional investment to enhance public transit service can increase corporate GHG emissions in absolute terms while significantly reducing community-based emissions (e.g., growth of corporate transit fleet assisting in reducing passenger vehicle travel).
- In February 2023, Council approved Durham Region [Transit's 2023-2032 Transit Service and Financing Strategy \(Report #2023-DRT-05\)](#) which outlines an unprecedented 10-year investment in DRT services, including a 127 percent increase in revenue services, significant capital investments to implement the [DRT Fleet Electrification Plan](#), and priorities for infrastructure, accessibility, and passenger amenities. The 2024 budget includes an increase of 59,665 revenue service hours, bringing total service to 569,876 hours of conventional service and 174,692 hours of On Demand service.
  - DRT's first six battery electric buses are scheduled to be delivered in April 2024, and the bus fleet is anticipated to be fully electric by 2037. The 2024 budget includes the acquisition of 34 electric buses and supporting electrification infrastructure (pending federal funding approval). DRT's commitment to increasing revenue service hours and fleet electrification represents one of the most significant contributions the Region is making towards both community-wide and corporate decarbonization.
- c. In April 2023, Regional Council adopted a [Light Duty Fleet Electrification Plan](#) which outlines preliminary target years for 100 per cent electrification by fleet group. Figure 6 provides an update on the current state of light duty vehicle electrification across fleet groups, including battery electric vehicles (BEVs), plug-in hybrid electric vehicles (PHEV), hybrid electric vehicles (hybrid) and internal combustion engine vehicles (ICEVs). The 2024 budget includes investments of \$4.1 million for BEVs, PHEVs and hybrid vehicles in the Works and DRPS fleets.

**Figure 6: Light Duty Fleet Electrification Plan - 2021 Baseline, 2023 Actual, Targets**

- d. Staff are investigating the opportunity to pilot the use of renewable diesel as a seasonal diesel alternative for medium- and heavy-duty fleet during non-winter periods. A Request-for-Information (RFI) was undertaken by staff in the fall 2023 to assess market opportunities and understand the range of product offerings from various vendors, as well as associated environmental benefits and potential operating implications. Renewable diesel is a cleaner, green fuel, which could reduce the GHG emissions from summer diesel by 60 per cent or more (on a lifecycle basis). Potential cost implications continue to be assessed considering product price premiums, potential exemptions on applicable carbon fuel surcharges, and investments in the Region's fleet electrification plans.

### 3.7 Solid Waste Management.

- a. This source of emissions is related to the management of residential solid waste on behalf of a growing region of more than 250,000 households. Solid waste management makes up 57 per cent of corporate emissions, with DYEC contributing 36 per cent and closed Regional landfills contributing 21 per cent. Solid waste emissions are estimated to have declined by close to 2 per cent in 2023 due to a decrease in methane production at the Region's closed legacy landfills (DYEC held constant from 2022 values).



- b. Following Regional Council's decision to pause the procurement process for the Mixed-Waste Pre-Sort and Anaerobic Digestion (AD) Project in June 2022, staff developed an Organics Management Plan that was endorsed by Council in March 2023 ([Report #2023-WR-3](#)). The next steps to move the Region's organics management plan forward comprise of short- and long-term processes. The short-term process provides operational continuity by securing third-party organics processing capacity at a suitable AD facility beyond the end date of the current organics processing contract of June 30, 2024. The long-term process focuses on the future viability of the Region's AD Project. Regional staff will monitor the performance of the short-term organics management plan and adjust the long-term organics management plan requirements as appropriate.
- c. In October 2023, a biocover pilot project at the closed Oshawa landfill site was launched to determine if it can be an effective methane reduction method for closed landfill sites in the Region. The feasibility study estimates that a biocover could reduce methane emissions by up to 50 per cent and preliminary findings are promising. The pilot project will continue until March 2025, after which staff will determine whether the project warrants expansion.

### 3.8 Water and Wastewater

- a. Water and wastewater operations make up 21 per cent of total corporate emissions in 2023. This source of energy and non-energy emissions is related to the treatment, storage, and pumping of drinking water and wastewater for the benefit of residents, businesses, and institutions across the Region. Combined, water and wastewater produced approximately 37,200 tCO<sub>2</sub>e (rounded), largely relating to wastewater treatment operations (mainly biosolids incineration at Duffin Creek WPCP, fugitive wastewater emissions and natural gas usage).
- b. In 2023, the Works Department initiated the development of a Water and Wastewater GHG Emission Management Strategy to provide a roadmap towards decarbonization across the Region's water and sanitary sewer treatment plants, storage facilities and pumping stations. Work to finalize the Strategy is underway, and is anticipated to be presented to Council in Q2 2024 with identified decarbonization measures incorporated into the 2025 business planning and budgets process, including the 2025-2034 ten year capital plan. The Strategy will identify measures such as renewable natural gas (RNG) generation from wastewater treatment plants, and thermal heat recovery from the Region's sewer network as key opportunities to align corporate leadership with community-wide decarbonization objectives.
- c. The Strategy will also make recommendations for inclusion of additional emissions within the Region's corporate emissions inventory, mainly related

to Regional wastewater process emissions not currently quantified and reported. It is expected that the Region's emissions reporting protocols and boundaries for GHG reporting will be expanded for the 2025 CCAP update to include these additional emission sources.

#### **4. Durham Community Climate Adaptation Plan (DCCAP) Update – Towards Resilience**

4.1 This section provides an update on climate adaptation and resilience measures, and highlights implementation progress, by sector, on the proposed programs recommended in the DCCAP approved by Council in 2016.

4.2 In 2020, the Region updated its future climate projections using the most up-to-date climate information. This updated [climate modelling](#) indicates that the [climate change impacts](#) already being felt will become more intense and severe over the coming decades.

4.3 **Cross-Sector** – Recommended Programs to increase climate resilience and action across departments and sectors and strengthen social cohesion in communities.

- a. **CS1: Protect Our Outside Workers** – Durham Region approved a [Heat Stress – Occupational Health and Safety Directive](#) in 2023 to ensure protective procedures are in place to reduce the hazard of heat stress to all Region of Durham employees who work in high temperature environments.
- b. **CS2: Social Infrastructure for Emergency Resilience** – Several local area municipalities have or are developing cross-sector adaptation and resilience plans to identify and address local climate risks and vulnerabilities, including:
  - [City of Pickering](#) (in development),
  - [Town of Ajax](#),
  - [Town of Whitby](#), and;
  - [Municipality of Clarington](#).
- c. Other initiatives to support community resilience and cross-sector climate action have been initiated including:
  - [Climate Resiliency: A Resident's Guide](#) developed by Durham Environment and Climate Advisory Committee (DECAC),
  - [Sustainable Neighbourhood Action Program \(SNAP\)](#) in Ajax and Whitby, and

- Planning for a new Toronto and Region Conservation Authority (TRCA) Climate Ready Towers program for multi-unit residential buildings.
- d. **Corporate Resilience** – The Region and local area municipalities are required to develop [corporate asset management plans and reports](#) which include reporting of risk and climate change adaptation and mitigation initiatives. Integration of climate adaptation into infrastructure design and operations occurs on a divisional basis. The Region is currently developing a Sustainable Infrastructure Design Policy and Standard in alignment with Strategic Plan goals and values, providing a tool to operationalize sustainability into Transportation, Water and Wastewater, and Waste infrastructure projects and facilities. Staff expect to present an overview of a draft policy and example standard to Council for information later in 2024.
- 4.4 **Building Sector** – Recommended programs to improve resilience of new and existing buildings to future climate conditions, through development standards and adaptation retrofits.
- a. **B1: The Durham Climate Resilience Standards for New Buildings** –, The Region and several local area municipalities have approved new standards incorporating climate resilience into new construction. In 2023, Durham Council approved the Durham Standard – A Standard for Regional Municipality of Durham Facility Construction and Renovation Projects requiring measures for asset resiliency, circular economy, water efficiency and ecology. [Town of Ajax](#), [City of Pickering](#), [Town of Whitby](#), and [Municipality of Clarington](#) have Green Development Standards approved or under development that promote cool roofs, natural heritage and urban forest, stormwater management, renewable energy, and greenspace protection. The Conservation Authorities have also developed technical and engineering guidelines for stormwater management, guided by provincial requirements.
- b. **B2: Building Retrofit for Climate Resilience** – The Region is working to expand the Durham Greener Homes (DGH) program (described above in Section 2.3) to include resilience measures such as basement flood mitigation, stormwater management and sustainable landscapes. This program will cross-promote emergency preparedness and heat protection programs. Staff expect to bring a proposed program update that includes resilience measures to Council for review and approval later in 2024.
- 4.5 **Flooding Sector** – Recommended programs to proactively reduce urban and riverine flooding risk, severity, frequency, and impact.
- a. **F1: Address Urban Flooding** –

- There have been several urban flooding and stormwater related assessments and projects led by the local area municipalities, for example [Whitby Bridge and Culvert Master Plan](#), and [Uxbridge Stormwater Management Master Plan](#).
  - Following a [Stormwater Management Funding Feasibility Study](#), the Town of Ajax introduced a Stormwater Fee and Credit Program in 2023 to support funding for the Town's stormwater management program, including system maintenance and rehabilitation.
  - There are also examples of low impact development (LID) implementation projects across the Region at public facilities, within municipal rights-of-way, and at demonstration sites, for example at [Ontario Tech University's North Oshawa Campus](#), and [Ajax Lakeshore Rain Gardens](#), and [permeable parking installations](#).
  - In Q2 2023, Durham Region launched [Flood Ready Durham](#), an information and resource hub about flood risk and resilience in the community. The website helps residents learn about their flood risk level, different types of flooding, and offers guides and other resources to help get flood ready and know who to call if flooding occurs.
- b. **F2: Redefine Flood Hazards to Consider Climate Change & F4: Address Riverine Flooding** – Durham conservation authorities have led several initiatives including updated floodplain mapping for Durham's watersheds including analysis of future climate change scenarios (e.g., TRCA [Duffin's Creek](#), GRCA [Lovekin, Bouchette Point, Port Granby Creeks, Wilmot, Graham Creek](#)), watershed flood studies and management plans (e.g., [Lynde Creek, Krosno Creek](#)) and dike rehabilitation projects (e.g., [Ajax](#)).
- c. **F3: Improve Flood Forecasting, Warning and Emergency Response** – Conservation authorities continue to provide flood forecasting, flood status indicators, and flood warnings to municipalities and the broader community. Updated flood modelling developed through studies such as the Region's Flood Vulnerable Road and Crossing Hydraulic Capacity Assessment (outlined below in Road Sector), provide information for emergency planning. Where possible, local area municipalities together with other municipalities, conservation authorities, and Ministry of Natural Resources and Forestry develop annual Flood Contingency Plans and Flood Preparedness Guides (e.g., [Clarington Flood Preparedness Guide](#)). Area specific plans have also been developed, including Town of Ajax Lower Carruthers Site Specific Emergency Response Plan.



- 4.6 **Human Health Sector** – Recommended programs to reduce health risks associated with extreme heat through advanced warning, protective measures for vulnerable residents, and reduced ambient summer temperatures.
- a. **HH1: Extreme Weather Alert and Response (EWAR) System** – In 2016, Durham’s Health Protection division launched [Durham Region’s Heat Warning and Information System \(HWIS\)](#), which provides advance notice of extreme heat conditions to municipalities, community partners and the public so that heat response plans can be activated in advance of extreme heat.
  - b. **HH3: “Cool Durham” Heat Reduction Program** - In 2018, Durham developed [Keeping Our Cool - Urban Heat Strategy](#) providing an overview of urban heat island causes, impacts, high risk areas in Durham, and recommended reduction measures. The Durham Region Standard (refer to Section 3.5) and local area municipal green building standards (see Section 2.5) integrate measures to encourage cooling of buildings as part of new construction or major renovation. Efforts to reduce urban heat have also been considered in local area municipal initiatives such as parks and recreation plans, urban forest initiatives, and Sustainable Neighbourhood Action Program (SNAP) in Ajax and Whitby.
  - c. Durham Region Health Department (DRHD) is currently developing a region-wide [Climate Change and Health Vulnerability Assessment](#) to examine the health-related impacts of climate change. These include extreme heat, extreme weather, vector-borne diseases (e.g., [tick-borne diseases](#) and [West Nile virus](#)) access and quality of food and water, poor air quality, and ultraviolet radiation.
- 4.7 **Road Sector** – Recommended programs to improve road performance and resilience to extreme heat and rain events and protect from washouts at stream crossings.
- a. **R1 Resilient Asphalt Program** – Heat resilient asphalt standards are now available. Climate-related increases in heat will be monitored and implemented when warranted.
  - b. **R2: Road Embankment Program** – The Region has led several successful pilots to address the impacts of extreme storm events on road embankments, with lessons applied to new projects where application is warranted.
  - c. **R3: Adaptive Culverts and Bridges** – Durham Region worked with TRCA in 2022 to develop a Flood Vulnerable Road and Crossing Hydraulic Capacity Assessment, identifying roads most vulnerable to flooding and recommendations to prepare for more frequent and intense rainstorms. This work informs asset management, disaster route planning, and

prioritizing future investments. CLOCA completed a similar study in 2023, and planning is underway for GRCA to undertake this work in 2024. All risk assessment results will be made available to regional staff through Durham's GIS mapping.

- d. Durham Maintenance Operations – Roads and Facilities staff successfully secured funding from [Canadian Wildlife Federation \(CWF\)](#) to lead a pilot to implement pollinator gardens along two regional roads and at regional depot facilities. The process and outcomes will be monitored and may help inform a broader strategy for pollinator plantings along strategic regional roads and facilities on a larger scale. This work is supported by the [Council-endorsed DECAC motion](#) regarding programming to support pollinators on Regional facilities and along Regional Rights-of-Way to support natural habitats and restoration.

#### **4.8 Natural Environment Sector – Recommended programs to enhance natural capital and build climate resilience in the natural environment.**

##### **a. NE1: Achieving Climate Change Resilience in the Natural Environment**

- In 2022, a TRCA Durham Natural System Climate Change Vulnerability Assessment was developed to identify natural system vulnerability to future climate conditions, helping inform Durham Region's Natural Heritage System (NHS) science, policy, and planning.
- Recent watershed planning is incorporating climate change scenarios into the process (i.e., [TRCA Carruthers Creek Watershed Plan](#)), and some conservation authorities are developing climate adaptation strategies (i.e., [LSRCA](#)).
- Protection and natural system resilience continues to be supported by local area municipalities and conservation authority's securement of environmentally sensitive land, ecological restoration and management projects, neighbourhood, or project-scale nature-based initiatives. The Town of Ajax has recently developed an [Urban Forest Study](#), [Invasive Species Awareness Program](#), and Invasive Phragmites Strategic Management Plan which will inform other local area municipality approaches.
- New ecosystem services tools have been developed including TRCA, Credit Valley Conservation (CVC), and LSRCA's [Natural Asset Carbon Assessment Guide and Toolbox](#) in 2022, developed to estimate green infrastructure carbon sequestration and storage . [Oshawa's Municipal Natural Assets Initiative](#) was initiated to understand and increase resilience of natural assets along the Oshawa Creek. TRCA's [Nature-Based Climate Solutions Siting Tool](#)

was developed in 2023 to identify strategic locations for green infrastructure and co-benefits, and can be applied outside TRCA jurisdiction.

- In 2022, Durham Region and its five conservation authorities launched [Durham TREES](#), a subsidized rural tree-planting program resulting in 218,000 trees planted in two (2) years. Planning is underway for a second phase, as well as a partnership with Trees for Life to support the Federal government's [2 Billion Trees program](#) across the Region.
- Since 2020, the Region and local area municipalities have partnered with LEAF (Local Enhancement and Appreciation of Forests) to plant over 1,300 native trees and shrubs. The LEAF planting program offers a subsidized rate through the Backyard Tree Planting Program for residents, multi-unit property owners, and commercial property owners in participating municipalities.

#### 4.9 **Food Security Sector** – Recommended programs to address climate adaptation in the commercial agriculture and food supply sectors.

- a. **FS1: Convene Commercial Agriculture Task Force** – Following the approval of the Durham Community Climate Adaptation Plan in 2016, two addenda were developed to support development of climate adaptation strategies in the commercial agriculture and food supply sectors. In 2019 [Growing Resilience - A Durham Agriculture Sector Climate Adaptation Strategy](#) was developed by the Agricultural Sector Expert Task Force, identifying risks to the local agricultural sector and adaptation opportunities. In 2021, [Inspiring Next Steps - A Summary of Durham Region's Food Security Task Force](#) was developed summarizing climate change impact on residents' food access, the results of several food security initiatives and key recommendations on food security.
- b. In 2024, the Durham Food Policy Council published the first [Durham Food System Report Card](#), evaluating a range of local food system indicators including food access, production, farmland protection, waste, education and literacy, Indigenous food sovereignty, cultural connections to food, and farmers and food system worker welfare. This report card and the above noted strategies support the objectives of the citizen-led [Durham Food Charter](#) developed in 2009.

## 5. **Relationship to Strategic Plan**

### 5.1 This report aligns with the following strategic goals and priorities in the Durham Region Strategic Plan:

- a. Goal #1 – Environmental Sustainability

- Goal 1.1 - Accelerate the adoption of green technologies and clean energy solutions through strategic partnerships and investment;
- Goal 1.4 - Demonstrate leadership in sustainability and addressing climate change; and
- Goal 1.5 - Expand sustainable and active transportation.

b. Goal #3 – Economic Prosperity:

- Goal 3.4 - Capitalize on Durham's strengths in key economic sectors to attract high-quality jobs.

## 6. Conclusion

- 6.1 Following Durham Region's climate emergency declaration, staff have focused on driving implementation of the Region's existing council-endorsed plans, and working to establish the Regional municipality as a leader in the context of community wide climate action. This report provides Council with an update on the implementation status of Region's three Council-endorsed climate action plans covering work on community-wide energy transitions under the DCEP, community-wide climate resilience initiatives under the DCCAP, and corporate climate leadership programs under the CCAP. The report identifies key challenges, opportunities, and next steps to better align climate action efforts with the vision, goals and targets established by Regional Council.
- 6.2 Within the DCEP, implementation remains focused on supporting energy retrofits in existing homes and buildings with planned enhancements to the Durham Greener Homes (DGH) program to leverage digital technologies to enhance resident engagement, and the initial implementation of the Durham Greener Buildings (DGB) Program. Critical work continues in new building construction, including creation of a voluntary green development support program for the building industry, and work to advance the feasibility of district energy opportunities in strategic growth areas. Transportation-related emissions continue to represent the largest share of the Region's community-wide carbon footprint, and will require sustained investment in public transit services, active transportation infrastructure, and EV charging infrastructure to see reductions in the coming years.
- 6.3 Within the CCAP, corporate building retrofits and high-performance new building construction are commencing, and GHG Emission Reduction Pathway studies are expected to be completed towards the end of 2024 for all building portfolios to enable integration of measures into the business planning and budgets process. The Water and Wastewater GHG Management Strategy is nearly complete and will provide a pathway towards decarbonization across Regional water and wastewater options, accounting for planned capacity growth to serve a growing population.



- 6.4 Within the DCCAP, implementation led by the Region, local area municipalities and conservation authorities is well underway across most recommended program areas. In 2024, the focus is on integrating resilience retrofit measures into the DGH program, developing a Durham Sustainable Infrastructure Design Policy and Standard, and completing Public Health climate vulnerability assessments. These will integrate equity considerations, leverage collaborations for collective impact, and consider strategic monitoring and evaluation to track change and demonstrate success.
- 6.5 This report has been reviewed by staff in Works, Finance, Planning, Social Services, Transit, DRPS, and Health, including RDPS and approved by Sandra Austin, Executive Director, Strategic Initiatives, 905-668-7711, extension 2449.
- 6.6 For additional information, contact: Ian McVey, Manager, Sustainability, at 905-668-7711, extension 3803.

Respectfully submitted,

**Original signed by**

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Elaine C. Baxter-Trahair  
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564.



# The Regional Municipality of Durham Report

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To:	Committee of the Whole
From:	Commissioner of Finance and Commissioner of Planning and Economic Development
Report:	#2024-COW-13
Date:	April 10, 2024

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**Subject:**

Sole Source Procurement for the Economic Study to undertake the analysis necessary to prepare the Region of Durham for the future prescribed Bill 131 Background Study

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**Recommendation:**

That the Committee of the Whole recommends to Regional Council:

- A) That a sole source contract for the preparation of an Economic Study to explore using the new Station Contribution Charge through the *GO Transit Station Funding Act, 2023*, to deliver four new GO stations along the Lakeshore East GO Extension to Bowmanville, which will build on the work completed for the Region's Station Implementation Strategy by N. Barry Lyon Consultants (NBLC), be awarded to a consultant team led by NBLC and including Watson & Associates Economists Limited, with an upset limit of \$285,000, to be financed through the approved 2024 Transit Oriented Development Division budget or at the discretion of the Commissioner of Finance; and
  - B) That the Commissioner of Finance be authorized to execute the necessary documents related to the contract.
-

**Report:****1. Purpose**

- 1.1 The purpose of this report is to seek approval from Regional Council to award a sole source contract for the completion of an Economic Study, being the initial analysis needed for the Region to understand the various factors that would affect the Transit Station Charge (TSC), if the Region were to utilize the new legislation. This Study is being done to further explore the use of the TSC through the *GO Transit Station Funding Act, 2023* as a precursor to the prescribed Bill 131 Background Study which has yet to be formalized through the related regulation.
- 1.2 Dollar amounts followed by an asterisk (\*) are before applicable taxes.

**2. Background**

- 2.1 The Region of Durham has been working with the provincial government for over 30 years to expand GO train service to Bowmanville, which is a 20-kilometre extension involving four proposed new GO stations in the City of Oshawa and the Municipality of Clarington.
- 2.2 On December 7, 2017, Metrolinx awarded a Technical Advisor contract to Stantec to provide technical advisory, design, and construction support services for the Lakeshore GO East Extension to Bowmanville. The Technical Advisor has designed the Extension only and not the stations to approximately 50 per cent, in anticipation of awarding a Construction Manager at Risk contract to refine and bring the Extension to 100 per cent design and priced for construction.
- 2.3 In 2018, the province announced it would no longer pay for new GO stations. Metrolinx introduced its Market Driven Strategy (MDS) to enforce the concept of “the benefiter pays”. Instead, Metrolinx would leverage the value of the new transit service and would work with landowners adjacent to GO stations, (who stand to benefit the greatest from the introduction of the transit service), to pay for the station in exchange for the rapid transit service.
- 2.4 The MDS is based on the ability of a single developer to pay for and build a GO station in exchange for the increased land value associated with the new transit infrastructure.

- 2.5 Despite having carried out an engagement process to identify station partners in Durham, it has proven challenging for Metrolinx to secure developer agreements to pay for any of the four stations, underpinned by the following reasons:
- a. The fragmented land ownership around the proposed stations means that no single land parcel can generate enough land value uplift to support paying for stations; and
  - b. The land value uplift and Regional market conditions are not strong enough within the Durham context for any single developer to absorb the cost of a station while supporting a viable development.
- 2.6 On June 15, 2023, Metrolinx awarded the rail extension Construction Manager at Risk (CMAR) contract to Bowmanville Construction Partners which is a general partnership between Ledcor CMI Ltd. and Dragados Canada Inc. This consortium will advance the Technical Advisor's work to take the rail extension to 100 per cent design for Metrolinx and will be the preferred contractor to build the Extension. At present, the CMAR does not include the design or construction of the four proposed stations.
- 2.7 On September 25, 2023, the Province of Ontario introduced the proposed *GO Transit Station Funding Act, 2023*, which later received royal assent on December 4, 2023. The legislation enables both upper, single and lower-tier municipalities to support the delivery of new GO Stations by using the collection of a Transit Station Charge generated from development projects being built surrounding Transit Oriented Communities through the completion of a prescribed Bill 131 Background Study and subsequent approval by the Minister of Infrastructure.
- 2.8 The prescribed Bill 131 Background Study will be detailed in the impending Regulation for the new legislation, which is expected to be completed by the Province in July 2024.

### **3. Sole Source Justification**

- 3.1 NBLC was engaged in 2021 to assist the Region in creating a modified market driven Station Implementation Strategy. NBLC has continued to work with the Region and has provided the foundational research and analysis for the strategy to date. The research and analysis completed will be used as the basis to inform the Economic Study. Time and cost savings will be realized by the Region to continue working with NBLC for the Economic Study. The Finance Department has also been seeking expert advice from Watson and Associates regarding both the Station Implementation Strategy and specifically the new revenue tool of the TSC. In



addition, Watson and Associates has assisted the Region on recent Official Plan and various Development Charge related work.

- 3.2 This study of a TSC and the related scope of work are completely new as the legislation was just passed on December 4, 2023. Given that their work in advising the Region on options to enable the construction of GO stations, NBLC is uniquely qualified due to their background and existing work completed to date.
- 3.3 With Metrolinx CMAR procurement for the rail extension continuing to move ahead quickly, it is critical that the Region rapidly completes the Economic Study to ready itself for the requirements of the Background Study that will be prescribed in the regulation to implement the *GO Transit Station Funding Act, 2023*.
- 3.4 Procurement of NBLC's services for the Economic Study will ensure the Region continues to work concurrently on exploring the opportunity to upfront the costs related to the delivery of the four new GO stations along the Lakeshore East GO Extension to Bowmanville using the TSC, while Metrolinx, and its partners', progress on the rail and station designs.

#### **4. Financial Implications**

- 4.1 Section 7.2 of the Region's Purchasing By-law #16-2020 permits the acquisition of goods and services through sole source negotiations under specific circumstances outlined in Appendix "C" of the by-law. Section 1.2 of Appendix "C" permits sole sourcing for, "additional deliveries by original supplier for goods/services from initial procurement if a change of supplier cannot be made due to interchangeability/interoperability with existing goods/services from initial procurement and would cause significant inconvenience or substantial duplication of costs". In addition, Section 1.8 of Appendix "C" permits sole sourcing if, "procurement is confidential and privileged in nature and disclosure through open process would compromise government confidentiality, waive privilege, cause economic disruption, and be contrary to the public interest".
- 4.2 The by-law also requires approval by the appropriate standing committee and Council for the award of sole source contracts that exceed \$100,000 in value.
- 4.3 Financing for a sole source Economic Study contract, estimated at a total contract value not to exceed \$285,000\*, will be funded from the approved 2024 Transit Oriented Development Office Division budget. However, it is anticipated that these funds will become recoverable if the Region decides to move forward with the

prescribed Bill 131 Background Study and the new TSC is approved by the Province.

## **5. Previous Reports and Decisions**

- 5.1 On May 6, 2022, the Commissioner of the Planning and Economic Development Department released Council Information Report #[2022-INFO-38](#), “Approval of the Lakeshore East GO Extension to Bowmanville”.
- 5.2 On March 29, 2023, Council considered and endorsed confidential staff report #2023-COW-11 containing information regarding the Bowmanville GO Extension station funding strategies.
- 5.3 On November 15, 2023, the Committee of the Whole received report [2023-COW-38](#), seeking endorsement of Durham Region’s response to Ontario’s Regulatory Registry post regarding the proposed *GO Transit Station Funding Act, 2023*, which identified the Region’s support for the legislation and proposed a few amendments. This report subsequently received Council endorsement on November 29, 2023.

## **6. Relationship to Strategic Plan**

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
  - a. Goal 1 Environmental Sustainability: Objective 1.5: Expand sustainable and active transportation.
  - b. Goal 2 Community Vitality: Objective 2.1: Revitalize existing neighbourhoods and build complete communities that are walkable, well-connected, and have a mix of attainable housing.
  - c. Goal 3 Economic Prosperity: Objective 3.3: Enhance communications and transportation networks to better connect people and move goods efficiently.
  - d. Goal 4 Social Investment: Objective 4.1: Revitalize community housing and improve housing choice, affordability, and sustainability.

## **7. Conclusion**

- 7.1 It is recommended that Regional Council approve the award of a sole source contract in the amount of \$285,000 for the completion of the Economic Study to NBLC and its subconsultant, Watson and Associates with the funding to be provided from the approved 2024 Transit Oriented Development Office division budget or at the discretion of the Commissioner of Finance.

Respectfully submitted,

Original signed by

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Brian Bridgeman, MCIP, RPP, PLE  
Commissioner of Planning and  
Economic Development

Original signed by

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Nancy Taylor, BBA, CPA, CA  
Commissioner of Finance

Recommended for Presentation to Committee

Original signed by

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Elaine C. Baxter-Trahair  
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564.



# The Regional Municipality of Durham Report

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To: Committee of the Whole  
From: Commissioner of Finance and Commissioner of Planning and Economic Development  
Report: #2024-COW-14  
Date: April 10, 2024

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**Subject:**

The Region of Durham's response to the Ontario Regulatory Registry posting related to the "Proposal to create regulation to support implementation of the GO Transit Station Funding Act, 2023"

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**Recommendation:**

That the Committee of the Whole recommends to Regional Council:

- A) That the letter from the CAO to the Province of Ontario as contained in Attachment 2 to Report #2024-COW-14, be endorsed as the Region of Durham's response to Ontario's Regulatory Registry post regarding the proposal to create regulation to support the implementation of the *GO Transit Station Funding Act, 2023*; and,
  - B) That a copy of this report and Council resolution be sent to all area municipalities within the Region of Durham.
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**Report:**

**1. Purpose**

- 1.1 The purpose of this report is to seek Regional Council endorsement of Regional staff's submission to the Province dated March 27, 2024, regarding the feedback the Ministry of Infrastructure is seeking to develop a regulation to implement the Transit Station Charge (TSC) through the *GO Transit Station Funding Act, 2023*.



- 1.2 On December 4, 2023, the *GO Transit Station Funding Act, 2023* received Royal Assent. The legislation enables upper, single and lower-tier municipalities, as may be prescribed, to support the delivery of new GO stations through the collection of a TSC generated from development to pay for costs related to the construction of stations that the municipality has agreed to upfront finance.
- 1.3 The proposed feedback request from the Ministry of Infrastructure was posted for a 45-day comment period on the Ontario Regulatory Registry, which ended on March 29, 2024 (24-MOI003). As such, Regional staff submitted preliminary comments to ensure that the Region of Durham's comments were received prior to the commenting deadline. Should Regional Council wish to offer additional or different comments, a revised response to the Province will be submitted.

## **2. Background**

- 2.1 The Region of Durham has been working with the provincial government for over 30 years to expand GO train service to Bowmanville, which is a 20-kilometre extension involving four proposed new GO stations in the City of Oshawa and the Municipality of Clarington.
- 2.2 On December 7, 2017, Metrolinx awarded a Technical Advisor contract to Stantec to provide technical advisory, design, and construction support services for the Lakeshore GO East Extension to Bowmanville. The Technical Advisor has designed the rail extension to approximately 50 per cent, excluding the stations, in anticipation of awarding a Construction Manager at Risk contract to refine and bring the rail extension to 100 per cent design and priced for construction.
- 2.3 In 2018, Metrolinx introduced its Market Driven Strategy. This strategy introduced the concept of "the benefiter pays", where the Province would no longer pay for new GO stations. Instead, Metrolinx would leverage the value of the new transit service and would work with landowners adjacent to GO stations, (who stand to benefit the greatest from the introduction of the transit service), to pay for the station in exchange for the rapid transit service.
- 2.4 The Market Driven Strategy is based on the ability of a single developer to pay for and build a GO station in exchange for the increased land value associated with the new transit infrastructure.
- 2.5 Despite having carried out an engagement process to identify station partners in Durham, it has proven challenging for Metrolinx to secure developer agreements to pay for any of the four stations, underpinned by the following reasons:

- a. The fragmented land ownership around the proposed stations means that no single land parcel can generate enough land value uplift to support paying for stations; and,
  - b. The land value uplift and Regional market conditions are not strong enough within the Durham context for any single developer to absorb the cost of a station while supporting a viable development.
- 2.6 On June 15, 2023, Metrolinx awarded the rail extension Construction Manager at Risk (CMAR) contract to Bowmanville Construction Partners which is a general partnership between Ledcor CMI Ltd. and Dragados Canada Inc. This consortium will advance the rail extension to 100 per cent design for Metrolinx and will be the preferred contractor to build the rail extension. At present, the CMAR contract does not include the design or construction of the four proposed stations.
- 2.7 On September 25, 2023, the Province introduced new legislation, titled the *GO Transit Station Funding Act, 2023*.
- 2.8 On December 4, 2023, the *GO Transit Station Funding Act, 2023* received Royal Assent and came into force. This legislation:
- a. gives municipalities the ability to pass a by-law to collect a TSC to be levied on lands subject to development to pay costs related to the construction of a proposed new GO Transit station within a prescribed area around a proposed new GO station, provided a by-law is passed before the construction of the GO station begins;
  - b. provides that the TSC may recover costs related to station construction, interest on any debt incurred to pay any costs to be recovered, and any other amount provided for in the by-law;
  - c. makes the TSC payable upon the issuance of a building permit, with some provisions for earlier or later payments;
  - d. establishes reporting requirements for participating municipalities and a recourse for unpaid charges;
  - e. requires municipalities that choose to enact a TSC by-law to undertake a background study to determine if a charge is payable in any particular case, set the rate of the charge, establish the land area where the charges will apply, complete public consultation, and receive consent from the Minister of Infrastructure to pass the by-law; and
  - f. exempts lands owned and used for the purposes of a municipality or school board.

- 2.9 The Ministry of Infrastructure is seeking feedback to prepare regulation under the *GO Transit Station Funding Act, 2023* to implement the TSC and the transit station by-law. It is critical that the Province moves quickly on these regulations, as the design of the rail corridor extension for the Lakeshore East GO Extension to Bowmanville continues to progress, whereas the design of the stations are lagging behind significantly. If the Region were to upfront the cost of these stations through this new legislation, the longer it takes to determine the viability of the program, the more costs the Region could incur in redesign to have the stations work integrated with the rail corridor works, thereby decreasing the overall project feasibility.

**3. Proposal to create regulation to support implementation of the *GO Transit Station Funding Act, 2023***

- 3.1 The Ontario Regulatory Registry posting included a series of questions the Ministry of Infrastructure was requesting feedback on from stakeholders. The Ontario Regulatory Registry posting can be found in Attachment 2. Below includes a high-level summary of the Region of Durham staff's comments on the questions.

**How municipalities should be directed to map the boundaries to which they can apply the Transit Station Charge?**

- 3.2 The geographic boundaries for the collection of a TSC should relate to the impact that transit has on real estate value, as Bill 131 is based on land value capture.
- 3.3 Each community and each station site is unique, therefore the forecasted impact of the transit service on real estate value and development will be different. Broad considerations include the extent to which an area is urbanized, existing transit options, boundaries such as infrastructure, or natural features, and the status of land use permissions. As a result, mapping of the boundaries to which the TSC may apply should be determined by each municipality on a case-by-case basis as part of the preparation of the background study.
- 3.4 Any delineation is likely best started in the context of provincially delineated Major Transit Station Areas (MTSA) or Protected Major Transit Station Areas (PMTSA's) as the provincial policy that guides these delineations specifically prescribes policy benefits to land within a prescribed distance of a rapid transit station.
- 3.5 Flexibility related to the mapping should be provided to consider the following factors:

- a. the configuration/compact nature/walkability of the planned neighbourhood
- b. whether lands outside of the MTSA or PMTSA will be impacted by the presence of the rapid transit station and service
- c. the benefits provided to a wider geographic area from increased access to regional transit service.

**What costs related to construction of a new GO station should be recoverable through the Transit Station Charge?**

- 3.6 An excessive TSC will disincentivize development and is entirely contrary to the objective of equitably pooling land value uplift contributions by benefiting landowners in order to pay for a new GO station. It is critical that the TSC remains price sensitive and therefore cannot include endless costs to be recovered by Metrolinx and the municipality.
- 3.7 Construction costs for the station must be fixed at the time financing is being sought by the municipalities, as municipalities should not be involved in the delivery and oversight of the construction of the GO stations. Accordingly, it should not be the municipality's responsibility to pay for project cost over runs or unknown conditions.
- 3.8 The recoverable costs through the TSC should include:
  - All costs associated with the studies needed to complete the background study including those required to assess the feasibility and risks of paying for the station(s), legal and advisory fees for the design, implementation, financing and administration of the station funding by law; and
  - All design and construction costs including municipal advisory services for station design oversight.

**The methodology and considerations to be included when calculating the charge and any additional requirements of the background study?**

- 3.9 Reliable station costs should be examined against a conservative long term, market-based development forecast tested under several amortization time periods and interest rates scenarios.
- 3.10 Recognizing that a TSC is different than a development charge that seeks to achieve complete cost recovery, the methodology should consider the principles of equity and certainty for the private sector to have trust and confidence that the charge will reflect land value capture.



- 3.11 Municipalities should be allowed to vary the TSC throughout the geographic area the by-law is subject to as justified through the background study work related to land value uplift (i.e. varying the charge based on proximity to station), which will contribute to the overall calculation of the charge.
- 3.12 Municipalities should be permitted to use a conservative development forecast as municipalities cannot take on undue risk. There must be flexibility to allow for changes to the charge under exceptional circumstances.
- 3.13 A detailed methodology is included in Attachment 2.

**What are acceptable offset strategies or measures that prescribed municipalities can consider?**

- 3.14 The introduction of transit infrastructure and fast frequent service, combined with municipally and provincially sponsored land use permissions that allow for a range of high-density developments increases land value for landowners, which creates a significant offset to landowners developing within the area. This increase in land value coupled with reduced parking standards, expedited municipal approvals, and guaranteed access to municipal services are offsets that the municipalities can consider.

**What is the methodology for calculating municipal offsets and co-ordinating offsets with the requirement for fee payment?**

- 3.15 The offsets identified above are the primary drivers of land value increases that support the TSC payment. All other municipal fees and requirements, such as planning application fees, reduced parking standards, access to servicing, etc., should be incorporated into the analysis to show total value to the landowner and present it in the context of the difference in value if there were no station or transit service. The regulation should allow for a broad range of value related offsets such as guaranteed transit service based on municipal financial risk, as well as municipal offsets to ensure that this legislation continues to be based in a market driven strategy where the benefiter pays and does not become a municipal subsidy.

**In addition to the draft by-law and background study, what additional information, if any, should the Minister of Infrastructure require from municipalities before deciding to approve a Transit Station Charge by-law?**

- 3.16 Municipal commitment to ensure transit supportive land uses, densities and policies are in place along with servicing.

- 3.17 Overall, the regulation should provide prescribed municipalities as much flexibility as possible to identify the appropriate components and TSC that will work for their community to deliver new GO stations.
- 3.18 The municipality should retain the right to terminate all agreements in the event the Minister makes amendments to the by-law that render the TSC no longer feasible from the municipality's perspective.

**Should the Province consider exemption for certain forms of development from the Transit Station Charge?**

- 3.19 Yes, and these should be identified by the municipality relative to their local context and the amount of revenue the transit service will generate. In addition, government owned lands should be subject to the TSC unless the proposed form of development is an exempted land use as determined by the municipality.
- 3.20 Where public institutions are exempt, the exemption should only apply to the space being provided for public institutional purposes (i.e., not retail, or other commercial uses therein).
- 3.21 In addition to considering certain exemptions, municipalities should have the option to recover lost revenue from exemptions through the TSC, permit phase-ins for certain community uses such as non-profit housing, and pre-payment to hedge inflation, if in the municipality's view it is fair to the development industry and wouldn't disincentivize development.

**Additional Items for Ministry Consideration**

- 3.22 Interest costs paid by the municipality should be minimized wherever possible, and for this reason, no cost of any kind, and in particular interest costs, should be paid by a municipality until the designating TSC by-law is passed to collect the charge, and there is an agreement with Metrolinx that the station will be constructed.
- 3.23 In terms of Metrolinx staff costs to manage and deliver the project, this needs to be assessed in the context of whether the GO station is a planned capital project. Stations that are part of a planned Metrolinx capital extension project, such as the Bowmanville Go Extension, means that Metrolinx has already planned for the resources to deliver the project in its budget planning process. These fees should not be paid by the municipality and recovered from the private sector. If the station is not a planned capital project, the case for Metrolinx staff cost recovery may make sense.

- 3.24 In the case of a planned rail extension and the fact that there are finite costs that can be recovered, it does not make sense to seek land costs from the municipality which will be recovered through the private sector. The GO station asset and associated lands will be owned operated, maintained and leveraged for future optimization and as such, the private sector should not bear that cost either.
- 3.25 If the TSC results in funding that meets the target funding levels prior to debt retirement the municipality should be allowed to direct the surplus towards capital improvements that maybe necessary for accommodating improved services and increasing ridership.

#### **4. Previous Reports and Decisions**

- 4.1 On May 6, 2022, the Commissioner of the Planning and Economic Development Department released Council Information Report #[2022-INFO-38](#), “Approval of the Lakeshore East GO Extension to Bowmanville”, which provided Council with an update on the approved alignment of the Extension and identified next steps.
- 4.2 On March 29, 2023, Council considered and endorsed confidential Committee of the Whole Report #2023-COW-11 containing information regarding the Bowmanville GO Extension station funding strategies.
- 4.3 On November 29, 2023, Council considered and endorsed the recommendations of Committee of the Whole Report #[2023-COW-38](#), “Durham Region’s response to the proposed *GO Transit Station Funding Act, 2023* which is a section within Bill 131: *Transportation for the Future Act, 2023*”, which sought endorsement of Durham Region staff’s input into the draft *GO Transit Station Funding Act, 2023* legislation.

#### **5. Next Steps**

- 5.1 The Region will continue to explore the use of the new legislation as the regulation is developed as a means to ensure GO station delivery for the Bowmanville GO Extension project.
- 5.2 Regional staff will continue working with the Ministry of Infrastructure on the draft regulation, and report back to Council accordingly.

#### **6. Relationship to Strategic Plan**

- 6.1 The Lakeshore East GO Extension to Bowmanville will improve mobility and travel options, supports transit-oriented development and in particular, housing, and aligns

with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- a. Goal 1 Environmental Sustainability: Objective 1.5: Expand sustainable and active transportation.
- b. Goal 2 Community Vitality: Objective 2.1: Revitalize existing neighbourhoods and build complete communities that are walkable, well-connected, and have a mix of attainable housing.
- c. Goal 3 Economic Prosperity: Objective 3.3: Enhance communications and transportation networks to better connect people and move goods efficiently.
- d. Goal 4 Social Investment: Objective 4.1: Revitalize community housing and improve housing choice, affordability, and sustainability.

## **7. Conclusion**

- 7.1 The *GO Transit Station Funding Act, 2023* received Royal Assent and came into force on December 4, 2023.
- 7.2 The Ministry of Infrastructure is preparing regulations to implement the funding tools set out in the Act and is seeking feedback from stakeholders.
- 7.3 It is recommended that this Report and its recommendations be endorsed as the Region of Durham's response to the feedback request on the Ontario Regulatory Registry as the next step required to support the design and construction of new GO stations in the Metrolinx service area.
- 7.4 This report has been prepared in consultation with the CAO's office.

## **8. Attachments**

Attachment #1: Ontario Regulatory Registry Posting 24-MOI003

Attachment #2: Region of Durham Submission to the Ontario Regulatory Registry, commenting on the Ministry of Infrastructure's proposal to create regulation to support implementation of the *GO Transit Station Funding Act, 2023*



Respectfully submitted,

Original signed by

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Brian Bridgeman, MCIP, RPP, PLE  
Commissioner of Planning and  
Economic Development

Original signed by

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Nancy Taylor, BBA, CPA, CA  
Commissioner of Finance

Recommended for Presentation to Committee


Original signed by

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Elaine C. Baxter-Trahair  
Chief Administrative Officer

## Act

## Proposed GO Transit Station Funding Act, 2023

<b>Regulation Number(s):</b>	N/A
<b>Instrument Type:</b>	Act
<b>Bill or Act:</b>	GO Transit Station Funding Act, 2023
<b>Summary of Decision:</b>	<p>Bill 131, Transportation for the Future Act, 2023 was passed by the legislature and received Royal Assent on December 4, 2023. Schedule 2 of this Bill included the GO Transit Station Funding Act, 2023, which is now in force.</p> <p>The GO Transit Station Funding Act, 2023 will provide a new optional funding tool that will help municipalities to fund the design and construction of new GO stations. This tool will allow municipalities to recoup the costs through a charge on new development within specified areas surrounding those new stations.</p> <p>The Ministry of Infrastructure will consult on the regulation required to implement the GO Transit Station Funding Act, 2023 through a forthcoming Regulatory Registry posting.</p>
<b>Analysis of Regulatory Impact:</b>	<p>The Ministry of Infrastructure will be consulting on subsequent regulations required to implement this tool. Such regulations will focus on the prescribed information and requirements of the background study and for the creation of a by-law, amongst other items, will be consulted on through future Regulatory Registry postings. Feedback from this and future postings will inform this proposal.</p>
<b>Further Information:</b>	 <a href="#">GO Transit Station Funding Act, 2023</a>
<b>Proposal Number:</b>	23-MOI004
<b>Posting Date:</b>	September 25, 2023
<b>Summary of Proposal:</b>	<p>The Province is consulting on the GO Transit Station Funding Act, 2023, that would, if passed, allow municipalities to fund the design and construction of new GO stations and recoup the costs through a charge on new development within specified areas</p>

surrounding those new stations.

The use of the tool, known as the station contribution fee, will only be permitted in municipalities where the Province has determined a new GO station is warranted. Municipalities will be required to provide a background study and pass a by-law which clearly identifies the area to which the station contribution fee will apply, to be forwarded to the Province for approval. Municipalities given approval to use the station contribution fee will be prescribed in a regulation.

**Contact Address:** Ministry of Infrastructure  
Transit Oriented Communities Policy and Delivery  
Branch  
College Park  
777 Bay St  
4th Flr Suite 425  
Toronto  
ON M5G 2E5

**Royal Assent** December 4, 2023

**Date:**

**Decision:**

Approved

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Sent Via Ontario Regulatory Register



March 27, 2024

Ministry of Infrastructure  
 Transit Oriented Communities Policy  
 & Delivery Branch College Park  
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**The Regional Municipality  
 of Durham**

**Planning and Economic  
 Development Department**

**Planning Division**

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**Brian Bridgeman, MCIP,  
 RPP, PLE**  
 Commissioner of Planning and  
 Economic Development

**RE: Ministry of Infrastructure's Ontario Regulatory Registry  
 proposal to create regulation to support the  
 implementation of the GO Transit Station Funding Act,  
 2023, Proposal No. 24-MOI003**

On behalf of the Region of Durham, please accept the following staff commentary in response to the "Proposal to create regulation to support the implementation of the GO Transit Station Funding Act, 2023". Please note that due to the commenting period on the Ontario Regulatory Registry, regional staff will be seeking endorsement of this letter at its Regional Council meeting on April 24, 2024. Should any modifications be made by Regional Council, I will immediately advise your office.

Regional staff continue to be supportive of the GO Transit Station Funding Act, 2023, which received Royal Assent on December 4, 2023, and which established the new funding tool to enable prescribed municipalities (referenced as "municipality" or "municipalities") to support the construction of critical new GO stations. The Region appreciates that the Ministry is now starting to develop the regulation needed to implement the Transit Station Charge (TSC) and urges the Ministry to continue to work collaboratively with its stakeholders to develop the regulation in a timely manner, understanding the compressed timeline that the Region of Durham continues to operate within.

Please find Regional staff comments and feedback below related to the questions posed in the Ontario Regulatory Registry posting.

**How municipalities should be directed to map the boundaries  
 to which they can apply the Transit Station Charge?**

The geographic boundaries for the collection of a TSC should relate to the impact that transit has on real estate value, as Bill 131 is based on land value capture.



Each community and each station site is unique, therefore the forecasted impact of the transit service on real estate value and development will be different. Broad considerations include the extent to which an area is urbanized, existing transit options, boundaries such as infrastructure, or natural features, and the status of land use permissions. As a result, mapping of the boundaries to which the TSC may apply should be determined by each municipality on a case-by-case basis as part of the preparation of the Background Study.

In general, the process for mapping the boundaries should include the following:

- **Review MTSA Boundaries.** Many municipalities will have established Major Transit Station Area (MTSA) boundaries for future transit expansions as there is provincial policy that guides these delineations and specifically prescribes policy benefits to land within a prescribed distance of a rapid transit station. This work should be reviewed and considered as the minimum boundaries for the TSC. The MTSA (or PMSTA) boundaries should be reviewed against lands available for redevelopment and the impact on the overall community.
- **Lands Available for Redevelopment.** An analysis of the local area that considers the pattern of existing land use and the probability of redevelopment as a result of the transit investment – often called a “soft site” analysis – should be undertaken. Sites that are close to, but not within the boundary of the MTSA might be included if it is determined that the transit service would have a material impact of the development or redevelopment of the area.
- **Impact on the overall community.** The boundary may also be influenced by the overall impact on the community. Where the transit offers a new service in an area where it is expected that the market impacts extend beyond the MTSA a larger TSC area might be considered. For example, for Greater Golden Horseshoe communities that rely heavily on highway infrastructure to access the City of Toronto, the introduction of GO services may have a much more significant market impact than that experienced in more urban areas.

### **What costs related to construction of a new GO station should be recoverable through the Transit Station Charge?**

As a precursor to advising on what would be fair to ask the private sector to pay in terms of cost recovery, it is critical to state that there is only so much cost that the private sector will be willing to bear, and that an excessive TSC will disincentivize development and is contrary to the objective of equitably pooling land value uplift contributions by benefiting landowners in order to pay for a new GO station. The TSC must be price sensitive and therefore cannot

include endless costs to be recovered by Metrolinx and the municipality.

In addition to identifying what is fair for the private sector to pay, it is critical to ensure that construction costs for the station are fixed at the time financing is sought by the municipalities, as municipalities should not be involved in the delivery and oversight of the construction. Accordingly, it should not be the municipality's responsibility to pay for project cost over runs or unknown conditions.

The recoverable costs through the Transit Station Charge should include:

- All costs associated with the studies needed to complete the Background study, including those required to assess the feasibility and risks of paying for the station(s), legal and advisory fees for the design, implementation, financing and administration of the station funding by law.
- All design and construction costs including municipal advisory services for station design oversight.

**The methodology and considerations to be included when calculating the fee and any additional requirements of the background study?**

Reliable station costs should be examined against a conservative long term, market-based development forecast tested under several amortization time periods and interest rate scenarios.

Recognizing that a TSC is different than a development charge that seeks to achieve complete cost recovery, the methodology should consider the principles of equity and certainty for the private sector to have trust and confidence that the charge will reflect land value capture.

Municipalities should be allowed to vary the TSC throughout the geographic area the by-law is subject to as justified through the background study work related to land value uplift (i.e., varying charge based on proximity to station), which will contribute to the overall calculation of the charge.

Municipalities should be permitted to use a conservative development forecast, as municipalities cannot take on undue risk. There must be flexibility to allow for changes to the charge under exceptional circumstances.

The following summarizes the key steps Durham Region believes should be included as part of the Background Study methodology:

- **Identify probable TSC area boundaries:** As discussed above several scenarios should be developed to evaluate/assess the impact of various approaches to the boundaries of the TSC collection areas.
- **Identify soft sites:** Within each boundary scenario identify development or redevelopment sites and calculate the probable development yield from each site in terms of gross floor area and unit yields for the forecast period.
- **Growth Forecasts:** A long term, market based, development forecast should be prepared based on the expected long-term demand for intensified land uses within the Station Areas based on:
  - The growth forecast for the community.
  - The market attributes of the station area geographic location including the pattern of existing and surrounding land uses.
  - The amount of growth forecasted for higher density development forms from a municipal perspective.
  - Lands that may attract development that could form competitive supply.
  - Long term demand forecast.
  - Market experience/observed growth of mixed use / medium and high-density development within the community to establish a baseline growth forecast – (without transit)
  - Review medium and high-density historical observed growth within existing Transit Oriented Community (TOC) sites in comparable market areas to establish a basis for forecasting.
  - An analysis will be conducted to consider how non-residential uses will be treated through the TSC.
- **Estimate TOC Capture** – Estimate the total forecasted demand for mixed use / medium and high-density growth within the community and how much of the forecasted demand might be captured within the MTSA (or adjusted TSC area) understanding that a component of the forecasted development could be captured elsewhere within the community.
- **Estimate the Land Value Uplift** – a financial model should be developed that tests the probable land value increase a developer's land would experience based on the new transit investment and the increased land use planning entitlements. This could be accomplished by developing a residual land value model that tests the supportable land value of a development – considering all costs, revenues and profit – of a development without transit. This analysis could then be compared to the same development with the increase in revenues and sales absorptions associated with the

development with transit in place. The land value uplift is the theoretical maximum amount a developer could direct toward a TSC without impairing the feasibility of the development.

- **Develop assumptions for testing** - Based on the above analysis a range of TSC charges based on per square foot of development area could be established for testing as well as other assumptions such as inflation rates.

**Financial Testing** - The information from the aforementioned market-based growth forecasts and land value uplift should now be used to forecast how much revenue may be collected over the forecast/borrowing period to pay down all eligible costs including the debt requirement for funding the new station (as costed by Metrolinx). An amortization schedule that includes assumptions related to borrowing period, interest rates, gross floor area requiring a TSC, the proposed TSC inflation, offsets, and other factors, as necessary. This analysis should be repeated for each boundary scenario proposed for the TSC.

The model may be used to test the sensitivity and make recommendations with respect to the following:

- The impact of various interest rates on the ability to pay off the Municipal debt along with timing of when the debt is incurred (i.e., before or at completion of station construction).
- The impact of increased or decreased development relative to base market-based growth forecasts.
- Exempt development types (i.e., affordable housing). In this case, testing should make clear assumptions of the proposed exemption(s). For example, affordable housing exemptions should look at the percentage of units required, the minimum building size, the type of development (rental and condo), the target affordability level and duration of affordability.

### **What are acceptable offset strategies or measures that prescribed municipalities can consider?**

The introduction of the transit infrastructure and fast frequent service, combined with municipally and provincially sponsored land use permissions that allow for a range of high-density developments increases land value for landowners, which creates a significant offset to developers. This increase in land value coupled with reduced parking standards, expedited municipal approvals, and guaranteed access to municipal services are offsets that the municipalities can consider.

Municipalities that are successful in obtaining funding from other levels of government should be able to apply this funding to the debt.



**What is the methodology for calculating municipal offsets and co-ordinating offsets with the requirement for fee payment?**

The offsets identified above are the primary drivers of land value increases that support the TSC payment. All other municipal fees and requirements such as planning application fees, reduced parking standards, access to servicing etc., should be incorporated into the analysis to show total value to the landowner, and presented in the context of the difference in value if there were no station or transit service. The regulation should allow for a broad range of value related offsets such as the guaranteed transit service based on municipal financial risk, as well as municipal offsets to ensure that this legislation continues to be based in a market driven strategy where the benefiter pays so that this does not become a municipal subsidy.

**In addition to the draft by-law and background study, what additional information, if any, should the Minister of Infrastructure require from municipalities before deciding to approve a Transit Station Charge by-law?**

- Municipal commitment to ensure transit supportive land uses, densities and policies are in place along with servicing.
- Overall, the regulation should provide municipalities as much flexibility as possible to identify the appropriate components and TSC that will work for their community to deliver new GO stations.
- The municipality should retain the right to terminate all agreements in the event the Minister makes amendments to the by-law that render the TSC no longer feasible from the municipality's perspective.

**Should the Province consider exemption for certain forms of development from the Transit Station Charge?**

Yes, and these should be identified by the municipality relative to their local context and the amount of revenue the transit service will generate. In addition, government owned lands should be subject to the TSC unless the proposed form of development is an exempted land use as determined by the municipality.

Where public institutions are exempt, the exemption should only apply to the space being provided for public institutional purposes (i.e., not retail, or other commercial uses therein).

In addition to considering certain exemptions, municipalities should have the option to recover lost revenue from exemptions through the TSC, permit phase-ins for certain community uses such as non-profit housing and pre-payment to hedge inflation, if in the municipality's view it is fair to the development industry and wouldn't disincentivize development.

### **Additional Items for Ministry Consideration**

- Interest costs paid by the municipality should be minimized wherever possible, and for this reason, no cost of any kind, and in particular interest costs, should be paid by a municipality until the designating by-law is passed to collect the TSC, and there is an agreement with Metrolinx that the station will be constructed.
- In terms of Metrolinx staff costs to manage and deliver the project, this needs to be assessed in the context of whether the GO station is a planned capital project or not. Stations that are part of a planned Metrolinx capital extension project, such as the Bowmanville GO Extension, means that Metrolinx has already planned for the resources to deliver the project in its budget planning process. These fees should not be paid by the municipality and recovered from the private sector. If the station is not a planned capital project, the case for Metrolinx staff cost recovery may make sense.
- In the case of a planned Extension and the fact that there are finite costs that can be recovered, it does not make sense to seek land costs from the private sector. The GO station asset and associated lands will be owned operated, maintained and leveraged for future optimization and as such, the private sector should not bear that cost either.
- If the TSC results in funding that meets the target funding levels prior to debt retirement the municipality should be allowed to direct the surplus towards capital improvements that maybe necessary for accommodating improved services and increasing ridership.

Regional staff continue to welcome the opportunity to meet and further discuss the regulation to support the Transit Station Charge through the GO Transit Station Funding Act, 2023.

Sincerely,

*Colleen Goodchild*

Colleen Goodchild, RPP, MCIP  
Director of Planning  
Regional Municipality of Durham

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564.



# The Regional Municipality of Durham Report

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To:	Committee of the Whole
From:	Commissioners of Planning and Economic Development, Finance, Social Services and Works
Report:	#2024-COW-15
Date:	April 10, 2024

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**Subject:**

Recommendations for Eligible Projects Under the At Home Incentive Program for Affordable Housing, File: D19-11

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**Recommendation:**

That the Committee of the Whole recommends to Regional Council:

- A) That Otter Creek Co-operative Homes Inc. located at 835 McQuay Boulevard in the Town of Whitby be supported through a re-allocation of the 2023 At Home Incentive Program funding in the amount of \$2,500,000 (or \$138,889 per affordable rental unit) to support the construction of 18 deeply affordable housing units which have been approved for funding under federal and provincial affordable housing programs and require additional funds from the Region due to construction cost escalation (Attachment #1)
- B) That the existing Municipal Housing Contribution Agreement with Otter Creek Co-operative Homes Inc. be amended to reflect the Municipal Capital Housing Facilities Bylaw requirements, and additional funding, and that the funding be advanced based on the following key construction milestones:
  - i) 50 per cent at the signing of the revised Municipal Housing Contribution Agreement and registration of security.
  - ii) 40 per cent at confirmation of fully enclosed building.
  - iii) 10 per cent at confirmation of occupancy.

- C) That following affordable rental housing projects and allocations be approved under the At Home Incentive Program (AHIP):
- i) Ledim Developments located at 310 Kingston Road East in the Town of Ajax in the amount of \$5,000,000 (or \$64,103 per affordable rental unit) to support the development and construction of 78 units of affordable rental housing in the Town of Ajax (Attachment #2) from the 2023 AHIP funds;
  - ii) Kindred Works located at 15-23 Main Street in the Township of Uxbridge in the amount of \$2,750,000 (or \$110,000 per affordable rental unit) to support the development and construction of 25 units of affordable rental housing (Attachment #3) from the 2024 AHIP funds;
- D) That financing for the projects listed in Recommendation C) be provided from the At Home Incentive Program Reserve Fund (AHIPRF) and advanced based on the following key construction milestones:
- i) 50 per cent at the signing of the Municipal Capital Housing Facilities and Contribution Agreement and registration of security.
  - ii) 40 per cent at confirmation of fully enclosed building.
  - iii) 10 per cent at confirmation of occupancy.
- E) That the Region enter into a Municipal Capital Housing Facilities and Contribution Agreement with each of the recommended parties, at the appropriate time, to:
- i) maintain affordable rents for the specified affordability period;
  - ii) continue to use the eligibility requirements for tenants;
  - iii) to enable the use of capital grants for eligible purpose-built affordable rental housing projects; and
  - iv) provide accountability and reporting requirements; and
- F) The Regional Solicitor be directed to prepare the necessary by-laws and any amendments required to the AHIP Reserve Fund By-law.
- 

## **Report:**

### **1. Purpose and Background**

- 1.1 The purpose of this report is threefold: i) to recommend support for the Otter Creek Co-operative Homes project in Whitby with \$2.5 million from the At Home Incentive



Program Reserve Fund (AHIPRF); ii) to summarize the evaluation process for Year 2 of the At Home in Durham Incentive Program (AHIP); and iii) to identify the proposals that will make the best use of available AHIP funding to maximize the value of the Region's investment in affordable housing.

- 1.2 In March 2022, Regional Council endorsed a new At Home Incentive Program to actively encourage the creation of new purpose-built affordable rental housing projects in Durham. The Program is implemented under a Regional Municipal Housing Facilities By-law.
- 1.3 The AHIP provides Regional funded capital incentives for the development of new purpose-built affordable rental housing projects. Funding is advanced to successful proponents during the construction phase of the project and flowed during specific construction milestones to ensure accountability for the funding and ensure the project is constructed. The program provides an opportunity for the Region to support the construction of new housing for low-income households, including households on the Durham Access to Social Housing (DASH) wait list, and to grow the supply of safe, adequate and affordable rental housing.
- 1.4 Last year (Year 1 of the AHIP, funded in 2022), nine proposals were received for projects located in Pickering, Oshawa, Scugog and Clarington. A total of \$7,450,000 of funding was allocated for two projects: Riverbank Homes Limited – Oshawa and Kindred Works – Pickering.
- 1.5 Riverbank Homes is planning to build 75 new affordable rental units in Downtown Oshawa with \$5,500,000 in AHIP funding. It will provide a mix of one and two-bedroom units for low- and moderate-income households. The proponent is waiting for CMHC to secure financing before the Region can sign their Municipal Capital Housing Facilities and Contribution Agreement and transfer any AHIP funding. Planning approvals and design are progressing, with construction planned to commence by July of 2024.
- 1.6 Kindred Works is developing 13 affordable housing units in Pickering, through a partnership with the United Church and CMHC. AHIP funding in the amount of \$1,950,000 was allocated for this project. Kindred Works required an Official Plan Amendment and Zoning By-law Amendment because the current land use is institutional. The proponent is working on their second submission to address local neighbourhood concerns. Kindred Works will need to establish how many affordable housing units will be built and secure financing before the Region can sign a Municipal Capital Housing Facilities and Contribution Agreement with them.

- 1.7 On September 21, 2023, a Call for Applications was released for a 90-day period (Year 2 of AHIP), as an invitation for qualified proponents to apply for up to \$5.5 million in Regional financial assistance to develop affordable housing units under the AHIP. The application period closed on December 20, 2023.
- 1.8 Of the available \$8 million AHIP allocation for 2023, \$2.5 million allocated to fund deeply affordable housing units where the project was in receipt of senior government funding and cost over-runs have threatened the completion of the project, as described in the following Section of this report.

## **2. Allocation to fund Otter Creek Co-operative Homes Inc. in Whitby**

- 2.1 The Region secured over \$6 million in Federal and Provincial funding to support a new build being developed by Otter Creek Co-operative Homes Inc. ("Otter Creek"), located at 835 McQuay Boulevard in the Town of Whitby (Attachment #1). The project is an 18-unit affordable low-rise apartment building for the seniors (non-health care related), as well as supportive units for people with developmental disabilities and people with mental health and addictions issues.
- 2.2 The project is being developed on land transferred from the Town of Whitby to Otter Creek for minimal costs, specifically for the development of affordable housing. The land is adjacent to an existing 84-unit townhouse community housing project which Otter Creek currently operates under the Housing Services Act.
- 2.3 Due to construction delays and increasing costs the project is in need of \$2.5 million additional funding to complete the building. Regional staff were not successful in securing additional funding to account for cost overruns from the upper levels of government. The federal funding under the Rapid Housing Initiative prohibits leveraging private equity to make up the shortfall.
- 2.4 Cost overages were expected and \$2.5 million of the \$8 million AHIP 2023 allocation was held back as a contingency. If the project is unable to be completed, all approved Federal and Provincial funding would be lost.
- 2.5 It is recommended that \$2.5 million, held back from the 2023 AHIP call for proposals, be re-allocated from AHIPRF to further support the development of 18 deeply affordable housing units in Whitby.

### **3. Evaluation Process**

- 3.1 In total, eleven new proposals were received for Year 2 projects located in Ajax, Uxbridge, Oshawa, Scugog and Clarington. A summary of the proposals is presented in Attachment #4.
- 3.2 Eligible projects were reviewed through an open and transparent process, with special attention paid to the highest needs for affordable rental housing within the Region at the time of the selection process.
- 3.3 To be eligible for AHIP, a minimum of 5 per cent of total units in eligible projects must be affordable at no more than 100 per cent of the applicable CMHC average market rent for a minimum 25-year period of affordability.
- 3.4 An interdepartmental committee consisting of staff from Planning and Economic Development, Social Services – Housing Services and Finance reviewed the applications. The eligible proposals were evaluated based on the following criteria:
  - a) community need, including but not limited to, targeted groups, unit size and geographic location;
  - b) period of affordability;
  - c) depth of affordability;
  - d) cost per square foot;
  - e) number of units and percentage of units in the project that will be affordable;
  - f) proximity to transit, community amenities and services;
  - g) extent to which the project reduces greenhouse gas intensity;
  - h) extent to which the project meets accessibility standards with respect to barrier-free designs, elevators and other accessibility features; and
  - i) proponent experience with rental housing development and management.
- 3.5 The proposals that best satisfied the criteria of the program and established the best use of available AHIP funding to maximize the value of the Region's investment in affordable housing were selected for the second phase of the AHIP evaluation.
- 3.6 Selected applications were further assessed by an independent consultant for financial viability of the proposed project, as well as the financial capacity of each proponent. The results of the evaluation were favourable, based on the methodology and financial information provided by the proponents.

**Ledim Developments, Ajax**

- 3.7 The proposal by Ledim Developments is located at 310 Kingston Road East in the Town of Ajax (Attachment 2). Ledim has requested \$5 million to build 78 units (\$64,103 per unit) within a 25-storey building.
- 3.8 The project meets the AHIP eligibility criteria with 20.5 per cent affordable units, at 100 per cent average market rent for 25 years. It ranked highly amongst other applications due to its location, with proximity to bus rapid transit and nearby shopping and amenities. The building is proposed to have 29 per cent lower energy use and 44.5 per cent less GHG emissions compared to National Energy Code for Buildings (NECB) 2017 compliance guidelines.
- 3.9 Ledim has proposed to build 6 bachelor and 72 1-bedroom apartments of affordable rental housing. It also incorporates 302 market rental units, including 124 1-bedroom, 167 2-bedroom and 11 3-bedroom apartments.
- 3.10 The project will provide a range of rental housing options in a compact transit-oriented development, including large number of affordable units. Nearly half of all units in the building are designed to accommodate people using assistive devices such as a wheelchair, in accordance with OBC requirements for such units.
- 3.11 Site specific Official Plan Amendment and Zoning By-law Amendment approvals are in place for this project. All Site Plan Application comments have been addressed and the final submission is complete. The applicant and design team consultants are currently finalizing detailed building plans for building permit application. The sanitary servicing availability for the site is dependant upon the completion of the improvements for the Durham-Scarborough Bus Rapid Transit project in this area.

**Kindred Works, Uxbridge**

- 3.12 Kindred Works is an independent company established by the United Church of Canada to provide a way to create housing. This proposal is located at 15-23 Main Street North in the Township of Uxbridge (Attachment 3). Kindred Works has requested \$2.75 million to build 25 units (\$110,000 per unit) within two 6-storey buildings. Redevelopment would occur on an existing church site (Trinity United Church) on the east side of downtown Uxbridge.
- 3.13 The project meets the AHIP eligibility criteria with 24% affordable units, at 100% average market rent for 40 years. It ranked highly amongst other applications due to its location, with proximity to services, shopping, and amenities.



- 3.14 For this development, 20 per cent of the units would be fully accessible and it will target equity seeking groups including racialized LGBTQ2S, Indigenous peoples, recent immigrants, and people with disabilities.
- 3.15 The project will target near Passive House<sup>1</sup> levels of energy use, airtightness, thermal insulation and thermal bridge avoidance, high-performance windows, and energy recovery ventilation. No fossil fuels will be burned on-site, reducing Scope 1 emissions to zero. It will be solar-ready in support of carbon neutral operations and designed to adapt to future climate conditions with high performance construction materials to improve energy efficiency, reduce operating costs, and provide energy savings to residents.
- 3.16 Kindred Works has proposed to build 25 1-bedroom apartments of affordable rental housing. It also incorporates 80 market rental units, including 33 1-bedroom, 43 2-bedroom and 4 3-bedroom apartments.
- 3.17 In November 2023, Town Council approved a density bonus of two additional storeys above the permitted four storeys. The subject site is currently proceeding to Site Plan Approval application, with plans to start construction in Fall 2024. Through the Site Plan Approval process, the proponent will need to assess the adequacy of the local watermains and determine if they need to construct any localized watermain upgrades to provide adequate fire protection.

#### **4. Financial Implications**

- 4.1 Of the AHIP funding available for 2023, \$2.5 million would be allocated to fund Otter Creek Co-operative Homes Inc.'s project in Whitby, where cost over runs threatened the completion of the project.
- 4.2 Furthermore, to encourage the creation of new purpose-built affordable rental housing projects in Ajax, it is recommended that Ledim Developments' proposal to build 78 units of affordable housing at 310 Kingston Road East be recommended for approval under the At Home Incentive Program (AHIP).
- 4.3 It is recommended that the Region provide upfront capital funding in the amount of \$5 million from the 2023 program (or \$64,103 per affordable rental unit), as

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<sup>1</sup> Passive House buildings consume up to 90% less heating and cooling energy than conventional buildings. The Passive House high-performance building standard is internationally recognized, and certification ensures that designers and consultants are expertly qualified to design buildings to meet the standard.

requested, to Ledim Developments to support the development and construction of their proposed affordable rental housing project.

- 4.4 Additionally, it is recommended that Kindred Works proposal to build 25 units of affordable housing at 15-23 Main Street North in the Township of Uxbridge be recommended for approval under AHIP.
- 4.5 While Otter Creek Co-operative Homes Inc's project (\$2.5 million) and Ledim Developments' proposal (\$5.0 million) would utilized the majority of the Region's 2023 allocation of \$8.0 million to the At Home Incentive reserve fund, it is recommended that the Region provide upfront capital funding in the amount of \$2.75 million (or \$110,000 per affordable rental unit), as requested, to Kindred Works to support the development and construction of the proposed affordable rental housing project in Uxbridge, given the quality of the proposal. The additional financing required can be provided from the 2024 allocation for the At Home Incentive Program Reserve Fund of \$8.0 million, leaving \$5.75 million available for 2024 projects.
- 4.6 A total of \$10.25 million will be provided from the At Home Incentive reserve fund to support the development of these projects providing affordable housing.
- 4.7 For all projects, it is recommended that the funds be advanced based on the following key construction milestones:
  - i) 50 per cent at the signing of the Municipal Capital Housing Facilities and Contribution Agreement and registration of security.
  - ii) 40 per cent at confirmation of fully enclosed building.
  - iii) 10 per cent at confirmation of occupancy.
- 4.8 The Region will need to enter into a Municipal Capital Housing Facilities and Contribution Agreement with each of the parties to:
  - i) maintain affordable rents for the specified affordability period;
  - ii) and continue to use the eligibility requirements for tenants;
  - iii) to enable the use of capital grants for eligible purpose-built affordable rental housing projects; and
  - iv) to provide accountability and reporting requirements.

## 5. Previous Reports and Decisions

5.1 Several reports have been prepared that provide background information related to this report:

- On November 13, 2019 Commissioners Report [#2019-COW-25](#) summarized the Region's five-year review report of At Home in Durham, the Durham Housing Plan 2014-2024, including a commitment to initiating the development of 1,000 new affordable housing units over five years.
- On December 11, 2019 Commissioners Report [#2019-COW-35](#) authorizing a Comprehensive Review for the Design of a Proposed Community Improvement Plan for Durham Region.
- On June 9, 2021 Commissioners Report [#2021-COW-16](#) provided an update on the implementation of At Home in Durham.
- On March 9, 2022 Commissioners Report [#2022-COW-7](#) approved the AHIP, and recommended that it be implemented through the establishment of the AHIPRF, AHIP Guidelines and an update to the Region's Municipal Housing Facilities By-law.
- On March 22, 2023 Commissioners Report [#2023-COW-13](#) approved AHIP funding of \$7,450,000 to build 88 new affordable rental housing units, for two separate projects located in the cities of Oshawa and Pickering.

## 6. Relationship to Strategic Plan

6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- a) Revitalize community housing and improve housing choice, affordability and sustainability.
- b) Revitalize existing neighbourhoods and build complete communities that are walkable, well-connected, and have a mix of attainable housing.
- c) Leverage Durham's prime geography, social infrastructure, and strong partnerships to foster economic growth.
- d) Build awareness and community capacity to address poverty.

## 7. Conclusion and Next Steps

7.1 To ensure the success of the Otter Creek Homes Inc. to build 18 new deeply affordable homes in Whitby and preserve approved upper level of government

funding, 2023 AHIP funding in the amount of \$2.5 million is recommended for re-allocation to support the project.

- 7.2 The At Home Incentive Program provides up-front capital funding for purpose-built affordable rental housing. The Program will advance the delivery of rental housing for low and moderate income households and support the Region's commitment for the initiation of 1,000 new affordable rental units by 2024.
- 7.3 The AHIP received many applications in the second year of the program, and the number and quality of submissions exceeded expectations. There is a clear opportunity to continue with the program given the number of submissions and initial interest in the program.
- 7.4 The selected projects would provide quality affordable housing to Durham residents across the region, while advancing Regional housing objectives. Furthermore, it supports Regional objectives that encourage intensification and provide for creative use of lands.
- 7.5 Given the quality of the selected proposals, and the significant opportunity presented, it is recommended that additional funds be provided from the 2024 allocation to the At Home Incentive reserve fund to permit both opportunities to proceed.
- 7.6 The proposal from Ledim Developments for 78 new affordable rental units ranked highest through the AHIP evaluation process. This proposal would nearly utilize the full \$5.5 million that was announced for the Call for Applications for 2023's program.
- 7.7 The proposal submitted by Kindred Works represents a unique opportunity to develop 25 units of much needed affordable rental housing in Uxbridge. It is recommended that this proposal be supported with upfront Regional capital funding in the amount of \$2.75 million, with \$2.25 million of the required funding to be provided from the 2024 allocation for the AHIP reserve fund.
- 7.8 As per the AHIP Guidelines, up-front Regional capital funding payments will be provided to the recommended projects based on key construction milestones to ensure accountability and reporting obligations.
- 7.9 As the program continues for subsequent years, it is important to leverage commitments from other levels of government and the private sector to maximize effectiveness of the AHIP program. The Region will continue to advocate for long-term, sustainable funding commitments and legislative and policy changes from



upper levels of government, to support the proposed At Home Incentive Program and affordable housing in Durham.

## 8. Attachments

- |               |  |
|---------------|--|
| Attachment #1 | Map of 835 McQuay Boulevard in the Town of Whitby (Otter Creek Homes Inc.) |
| Attachment #2 | Map of 310 Kingston Road East in the Town of Ajax (Ledim Developments)     |
| Attachment #3 | Map of 15-23 Main Street North in the Township of Uxbridge (Kindred Works) |
| Attachment #4 | 2023 At Home Incentive Program: Summary of Proposals                       |

Respectfully submitted,

Original signed by

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Brian Bridgeman, MCIP, RPP, PLE  
Commissioner of Planning and  
Economic Development

Original signed by

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Nancy Taylor, CPA, CA  
Commissioner of Finance/Treasurer

Original signed by

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Stella Danos-Papaconstantinou  
Commissioner of Social Services

Original signed by

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Ramesh Jagannathan, P.Eng., MPA  
Commissioner of Works

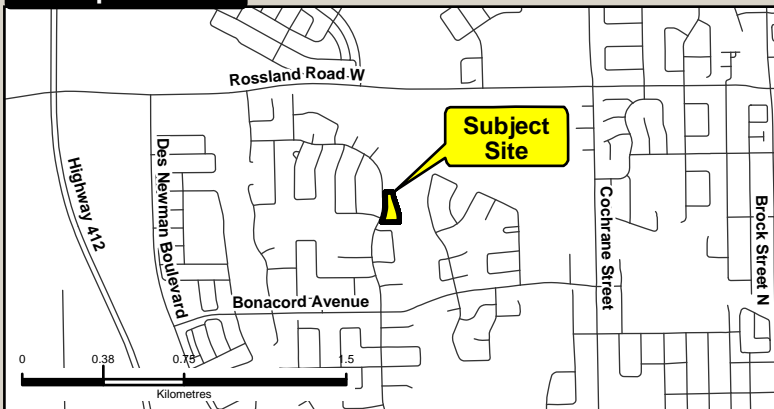
Recommended for Presentation to Committee

Original signed by

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Elaine Baxter-Trahair  
Chief Administrative Officer

# Municipal Context



**Attachment #1**  
**Commissioner's Report: 2024-COW-15**  
**Applicant: Otter Creek**  
**Co-operative Homes Inc.**  
**Address: 835 McQuay Boulevard, Whitby**

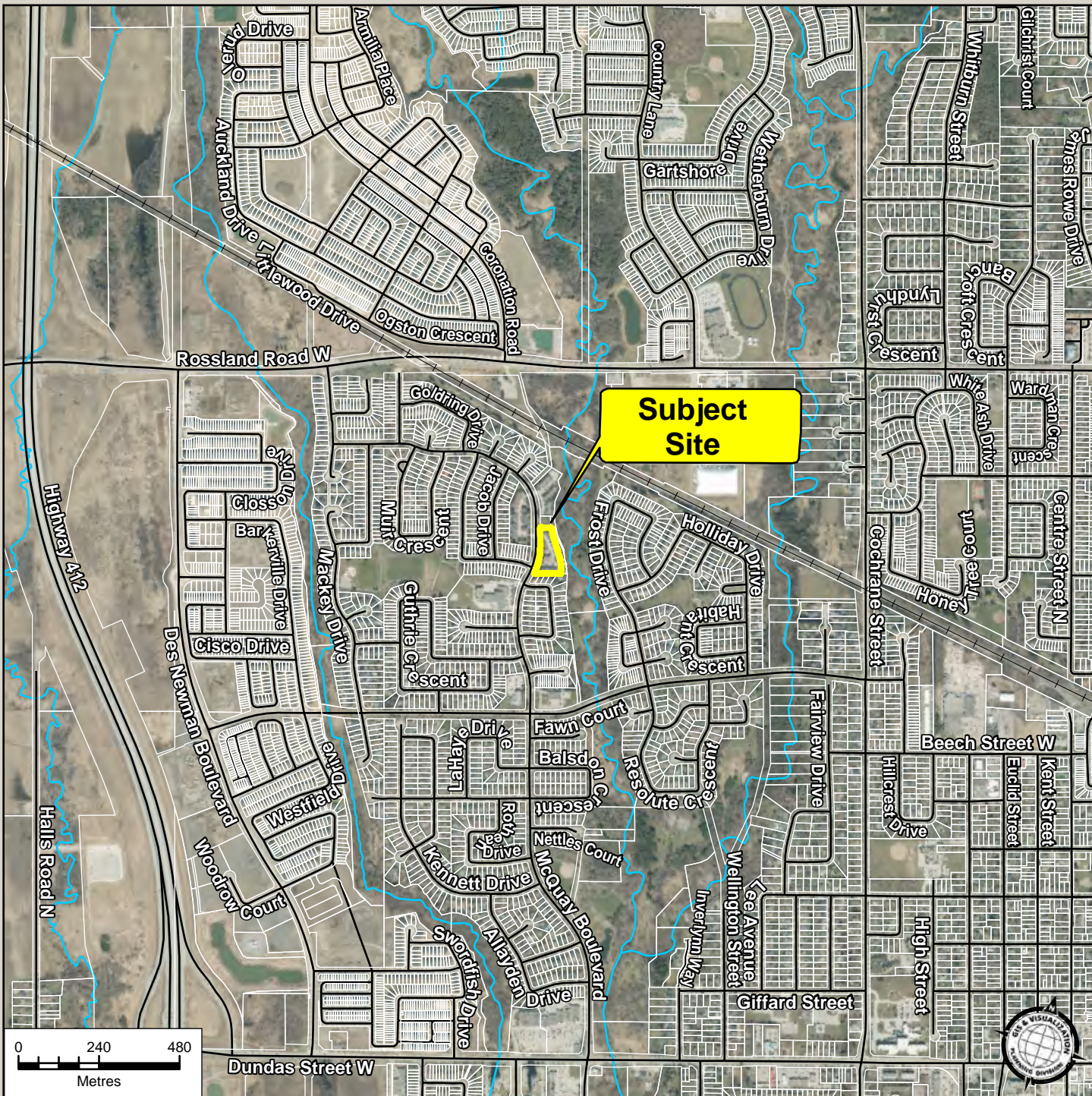
## Legend



Subject Site

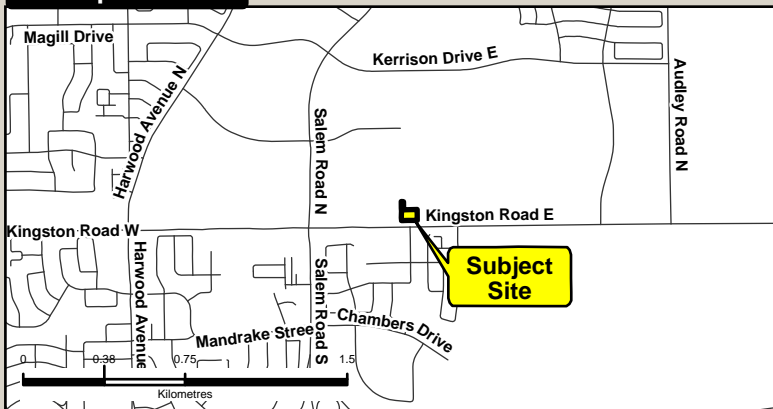


River or stream



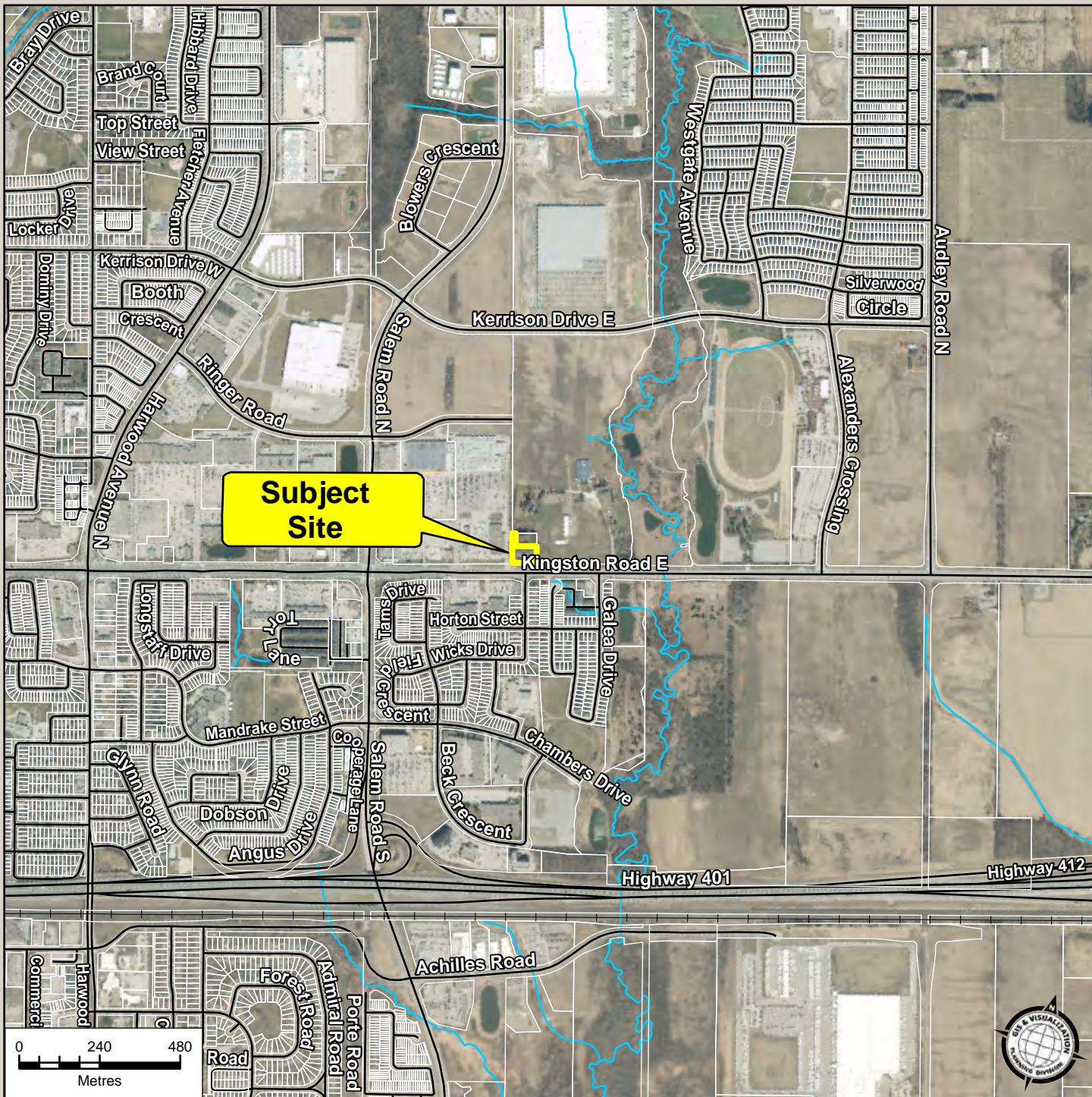


## Municipal Context



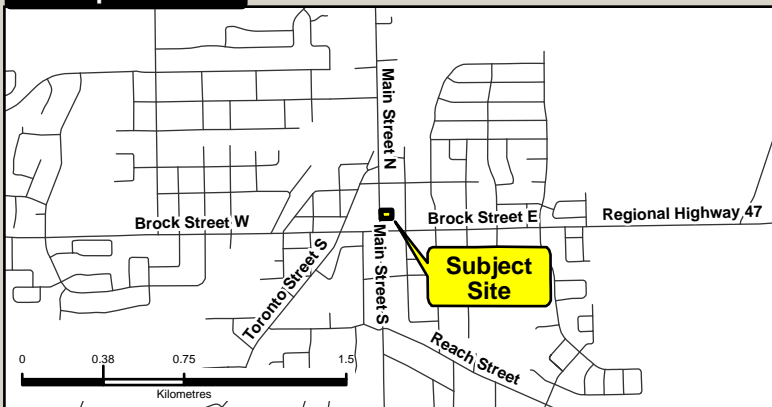
**Attachment #2**  
**Commissioner's Report: 2024-COW-15**  
**Applicant: Ledim Developments**  
**Address: 310 Kingston Rd. E., Ajax**

## Legend





## Municipal Context



## Attachment #3

Commissioner's Report: 2024-COW-15

Applicant: Kindred Works

Address: 15-23 Main Street N., Uxbridge

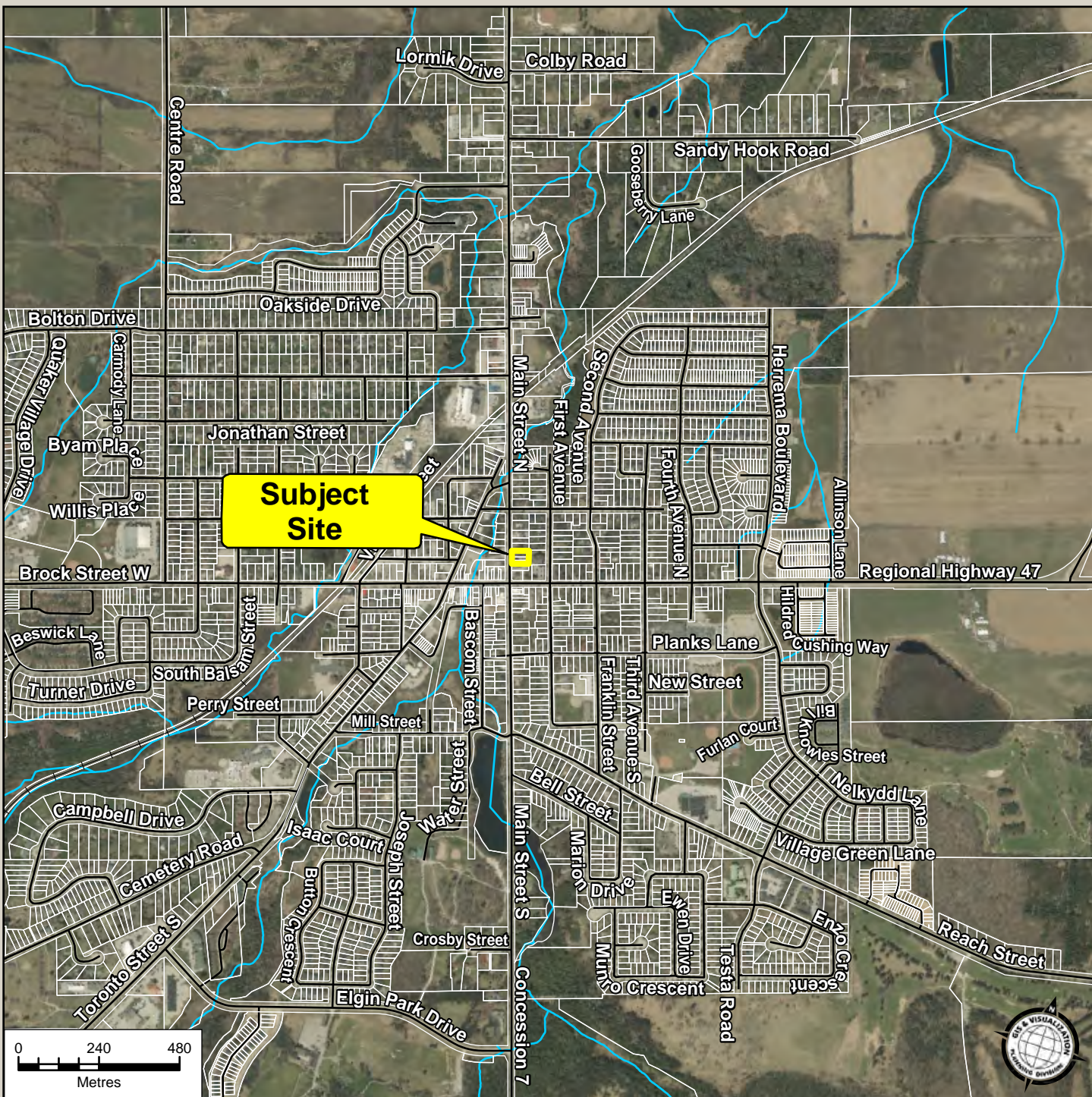
## Legend



Subject Site



River or stream



**2024 At Home Incentive Program: Summary of Proposals**

<b>Applicant</b>	<b>Address</b>
Borelia Co-operative Homes Inc.	10 Borelia Crescent, Port Perry
Durham Region Non-Profit Housing Corporation	200 Baseline Road West, Bowmanville
Gates of Bowmanville	191 Church Street, Bowmanville
JAKK	224 Hickory Street North, Whitby
Karmina – Treehouse Studios	1664 Simcoe Street North, Oshawa
Kindred Works – Oshawa	1350 Simcoe Street North, Oshawa
Kindred Works – Uxbridge	15-23 Main Street North, Uxbridge
Ledim Developments	310 Kingston Road East, Ajax
Muslim Welfare Centre of Toronto	1589-1603 Regional Highway 2 - Courtice
Refuge Youth Outreach	300 Court Street, Oshawa
Vale Residences	1465 Highway 2, Courtice



# The Regional Municipality of Durham Report

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To: The Committee of the Whole  
From: Commissioner of Finance and Commissioner of Planning and Economic Development  
Report: #2024-COW-16  
Date: April 10, 2024

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**Subject:**

Request for Funding from Kawartha Conservation Authority for the Acquisition of Land in the Township of Scugog (PT LT 19 Con 14, Reach; parts 2, 3 and 5, Plan 40R32476)

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**Recommendation:**

That the Committee of the Whole recommends to Regional Council:

- A) That in response to the request for funding from Kawartha Conservation Authority, that funding in the amount of \$3,971, representing 40 per cent of the estimated eligible acquisition costs for approximately 4.92 hectares (12.16 acres) of land located in the Township of Scugog (PT LT 19 Con 14, Reach; parts 2, 3 and 5, Plan 40R32476), be approved and financed from the Region's Land Conservation and Protection Reserve; and
  - B) That the Commissioner of Finance be authorized to adjust the total payment amount to Kawartha Conservation Authority pending a review of the eligibility of final costs incurred pursuant to the Region's Land Acquisition Funding Policy.
- 

**Report:**

**1. Purpose**

- 1.1 The purpose of the report is to advise Council of, and seek approval for, Kawartha Conservation Authority's request for funding under the Durham Region Land Acquisition Funding Policy for Conservation Authorities for the purchase of approximately 4.92 hectares (12.16 acres) of land in the Township of Scugog (PT LT 19 Con 14, Reach; parts 2, 3 and 5 Plan 40R32476) for the creation of a new passive recreation area referred to as the Tuck'd Away Trail Conservation Area.

## 2. Previous Reports and Decisions

- 2.1 In October 2007, Regional Council adopted the recommendations of Report 2007-J-36 entitled “Durham Region Land Acquisition Funding Policy for Conservation Authorities”. This report identified a process and eligibility requirements by which the Region’s five Conservation Authorities could apply for funding from the Region’s Land Acquisition Reserve Fund to finance the acquisition of properties for conservation purposes.
- 2.2 A goal of this policy is to ensure that land acquisition efforts of Regional Council in partnership with Conservation Authorities in Durham Region, will contribute to the protection, enhancement and restoration of the natural environment in Durham Region.

## 3. Kawartha Conservation Authority’s Request for Funding

- 3.1 Kawartha Conservation Authority is requesting approval for \$3,971 in funding from the Region, representing 40 per cent of the total estimated eligible acquisition costs of \$9,928 as outlined in Table One. The subject property was donated by the landowner to Kawartha Conservation Authority as part of the Ecological Gift Program through Environment and Climate Change Canada.

**Table One**

Description	Total Estimated Cost \$	Recommended Estimated Regional Portion (40 per cent) \$
Purchase Price (donated)	0	0
Survey, Legal Fees, and Appraisal Cost	3,971	9,928
<b>Total</b>	<b>3,971</b>	<b>9,928</b>

- 3.2 Kawartha Conservation Authority has advised that there will be some initial investment in fencing and signage in 2024, it is anticipated that the average annual budget for general maintenance and upkeep of this property will be approximately \$5,000.
- 3.3 Kawartha Conservation Authority received the donation of a 4.92 hectare (12.16 acre) parcel, known as Pt Lt 19 Con 14, Reach; parts 2, 3, and 5, Plan 40R32476 in the Township of Scugog. Portions of this property are identified as a Key Natural Heritage Feature and Key Hydrologic Feature in the current Regional Official Plan.



It is located within the Greenbelt Natural Heritage System and is designated as Major Open Space Areas in the current Regional Official Plan.<sup>1</sup>

- 3.4 Kawartha Conservation Authority's Board of Directors authorized staff to negotiate the donation of the property at their July 28, 2022 Board Meeting.

#### **4. Advancing Regional Planning Objectives**

- 4.1 In accordance with the Land Acquisition Funding Policy for Conservation Authorities, Regional Planning staff have reviewed Kawartha Conservation Authority's request and concluded that the request meets the primary planning criteria for eligibility.
- 4.2 Specifically, the acquisition of this property meets the objectives of the current Durham Regional Official Plan as this property:
- is being acquired for conservation purposes;
  - is located within or contributes to the enhancement of the current Regional Official Plan Greenlands System outside of urban areas;
  - contains key natural heritage and/or key hydrological features; and
  - supports the long-term planning and growth management of the Region.

#### **5. Financial Considerations**

- 5.1 The Region of Durham has established the Land Conservation and Protection Reserve Fund to, in part, make funding available to the Region's five Conservation Authorities for the purpose of acquiring environmentally sensitive lands.
- 5.2 The request from Kawartha Conservation Authority for \$3,971 in funding towards the eligible acquisition costs meets the maximum amount allowed within the Council approved Conservation Land Acquisition Funding Policy that limits the Region's maximum contribution for land purchases for conservation properties to 40 per cent of the total eligible costs.
- 5.3 There are sufficient uncommitted funds available in the Land Conservation and Protection Reserve Fund to finance the recommended funding of \$3,971 for Kawartha Conservation Authority's land acquisition.

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<sup>1</sup> The terminology in this report reflects the current Regional Official Plan. A new Regional Official Plan was adopted by Regional Council in May 2023 and is currently with the Province for approval.

## **6. Relationship to Strategic Plan**

6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- Goal 1.3 Environmental Sustainability – to protect, preserve and restore the natural environment, including greenspaces, waterways, parks, trails, and farmlands; and
- Goal 5.1 Service Excellence – to provide exceptional value to Durham taxpayers through responsive, effective and financially sustainable service delivery.

## **7. Conclusion**

7.1 The request from Kawartha Conservation Authority for \$3,971 in funding for the acquisition of approximately 4.92 hectares (12.16 acres) of land in the Township of Scugog for the creation of the Tuck'd Away Trail Conservation Area is recommended for approval as it meets the requirements of the Durham Region Land Acquisition Policy for Conservation Authorities.

## **8. Attachments**

Attachment #1: Letter and Map from Kawartha Conservation Authority requesting funding for the acquisition of the subject property

Respectfully submitted,

Original Signed By

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Nancy Taylor, BBA, CPA, CA  
Commissioner of Finance

Original Signed By

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Brian Bridgeman, MCIP, RPP  
Commissioner of Planning and Economic  
Development

Recommended for Presentation to Committee

Original Signed By

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Elaine C. Baxter-Trahair  
Chief Administrative Officer



March 13, 2024

Nicole Pincombe  
Regional Municipality of Durham, Finance Department  
605 Rossland Road East  
Whitby, ON, L1N 6A3  
Nicole.pincombe@durham.ca

**RE: Land acquisition request for funding**

Dear: Ms. Pincombe;

On February 20, 2024, Kawartha Conservation received the donation of a 12-acre parcel of land in the Township of Scugog. We respectfully submit this request for funding support through the Land Acquisition Funding program for Conservation Authorities, established by the Region of Durham. Further to our communications in late 2023, this letter and attachments will provide the detailed information required for the submission.

**SITE DETAILS**

Size: 4.8ha  
Location: Sunderland Ontario. Legal description of the donated parcel is: Pt Lt 19 Con 14, Reach; parts 2, 3, and 5, Plan 40R32476; Township of Scugog. (see map attached)  
Intended Use: Passive recreation as the newly established 'Tuck'd Away Trail Conservation Area'.  
Rationale: The donated property was part of the Ecological Gift Program and has been certified as Ecologically Sensitive through Environment and Climate Change Canada (see report attached). The property includes a portion of the Provincially Significant Wetland, Layton River Wetland Complex. As part of Kawartha's Naturally Connected natural heritage mapping project, this property is identified as Connected Natural Heritage Feature, Corridor, and Terrestrial Core Area, and is part of the Greenbelt's Protected Countryside. Tuck'd Away Trail is roughly 10 minutes from Port Perry along the western side of our watershed. This property will provide access to greenspace in an underserved portion of our watershed.

**KAWARTHA CONSERVATION**  
277 Kenrei Road, Lindsay, ON K9V 4R1  
705.328.2271 Fax 705.328.2286  
**KawarthaConservation.com**

**Our Watershed Partners:**

City of Kawartha Lakes • Region of Durham • Township of Scugog • Municipal of Caledonia • Township of Brock • Municipality of Trent Lakes • Township of Cavan Monaghan



## COSTS

Since the property was donated by the landowner, the only costs incurred are for the ancillary costs associated with land acquisition:

Legal Fees:	2,583.00
Appraisal Fee:	2,260.00
Survey Fee:	<u>5,085.00</u>
Total Cost:	9,928.00
<b>Total Request:</b>	<b>\$3,971.00</b>

## STEWARDSHIP COSTS:

This property will be managed as a Conservation Area. While there will be some initial investment in fencing and signage in 2024, it is anticipated that the average annual budget for general maintenance and upkeep will be roughly \$5,000 per year.

## SUPPORTING DOCUMENTS:

Please find attached the following documents to support our application:

- a) Location map of the property
- b) Appraisal Document
- c) Ecological Sensitivity Report
- d) Certificate of Ecological Sensitivity
- e) Board minutes of approval
- f) Land Registry

## SCHEDULE A CRITERIA:

Primary Considerations:

1. The property is being acquired for conservation purposes and managed as the Tuck'd Away Trail Conservation Area.
2. This property contributes to the Greenlands System outside of urban area.
3. The property contains key natural heritage and/or key hydrological features:
  - a. Layton River
  - b. Layton River wetland complex (PSW)
  - c. Habitat for Midland painted turtle (SC), Redheaded Woodpecker (SC/END)
  - d. Significant Groundwater Recharge Area (Trent Conservation Coalition Source Protection Region)
  - e. At least 22 fish species including longnose dace and the Iowa darter.
4. The acquisition of this property will not preclude or compromise future planned growth.



Secondary Considerations:

1. his property is NOT consolidating or enlarging another conservation area.
2. There is a Provincially Significant Wetland and Significant woodland located on the property.
3. The property is 99% natural cover, with a small area for parking which is maintained as mowed grass.
4. This property will provide access to greenspace and maintained trails in an underserved area of our watershed.

The above information is provided for your review. Please do not hesitate to contact me should you have any questions regarding the information provided, or if any information is missing.

Sincerely,

*Kristie Virgoe*  
*Director, Stewardship and Conservation Lands*

*Enclosures:    Ecogift Appraisal*  
*Ecological Sensitivity Report*  
*ON933 Certificate Letter*  
*Property Map*  
*Parcel Register*  
*Board Resolution*

**KAWARTHA CONSERVATION**  
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