

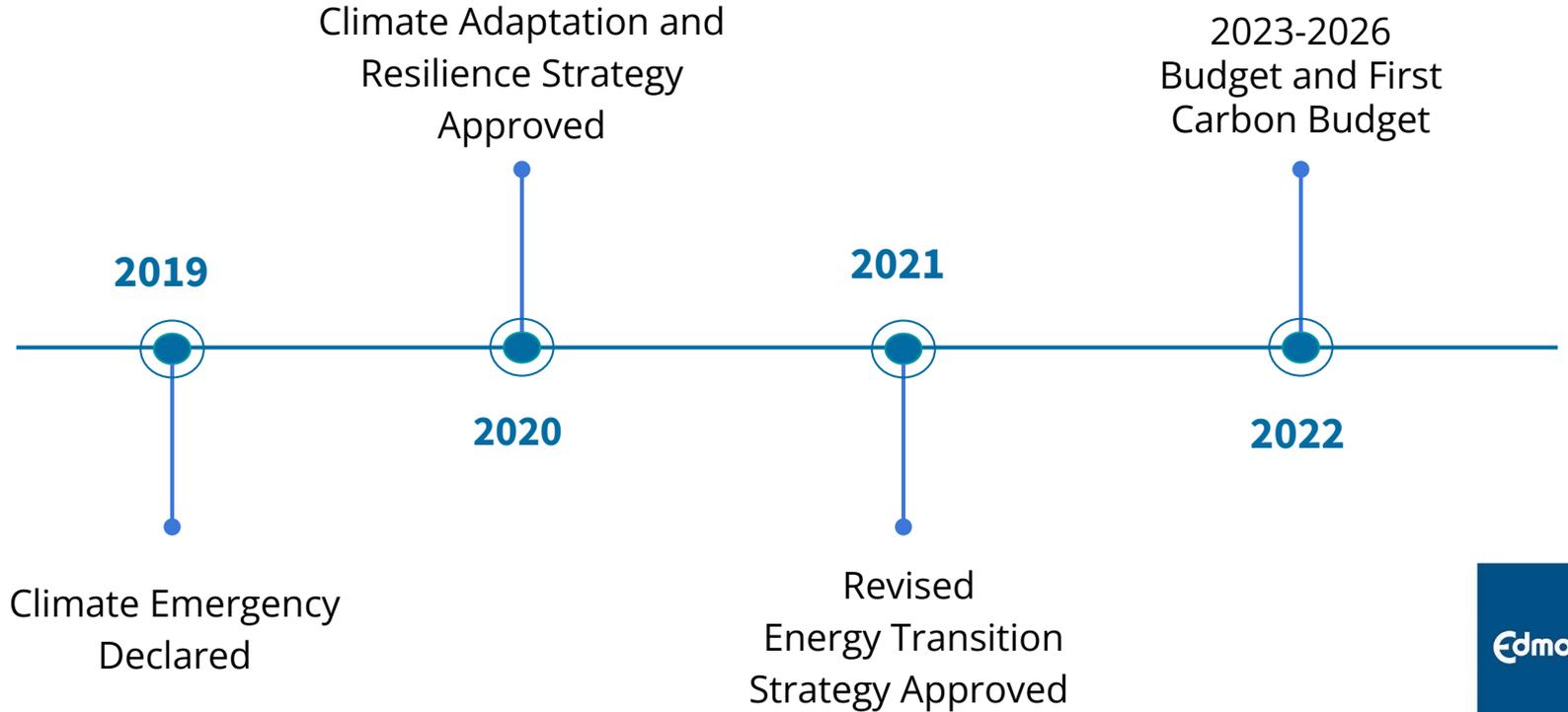
Urban Planning and Economy  
Financial and Corporate Services

Edmonton

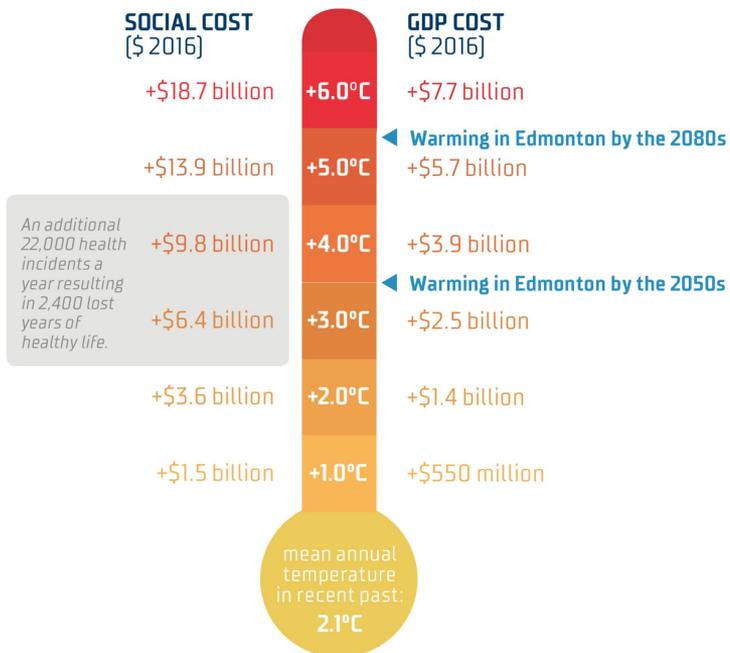
**Climate Strategies Update 2023**  
**Dedicated Climate Fund**

Executive Committee - November 1, 2023

# Background



# Edmonton's Climate is Changing

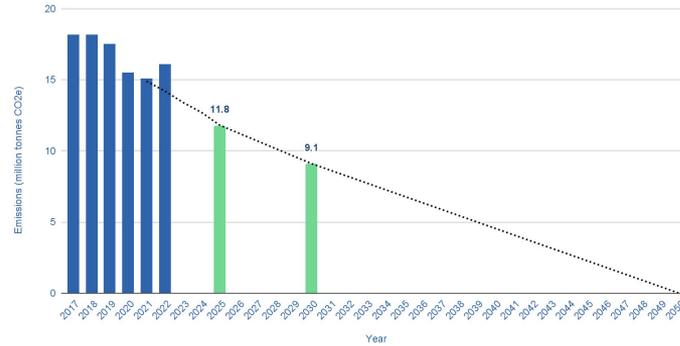


- Increased risk of urban flooding, more frequent and intense weather events, changing ecosystems
- Edmonton's GDP could be reduced by \$3.2 billion annually on average by the 2050s
- An additional 22,000 health incidents a year are expected to occur by the 2050s

# Greenhouse Gas Emissions

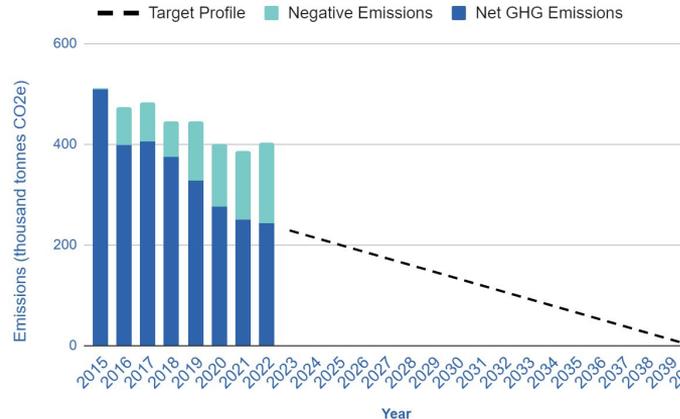
## Community Emissions

- Not on track - 2022 increased from previous years
- Overall 11.5% lower than 2005 baseline



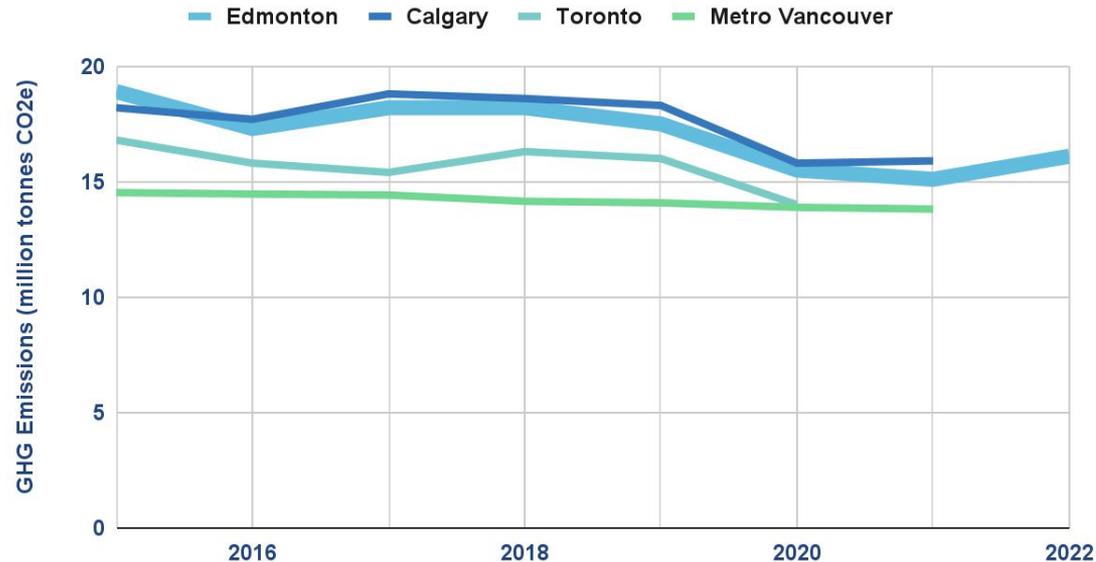
## Corporate Emissions

- On track due to the purchase of Renewable Energy Certificates



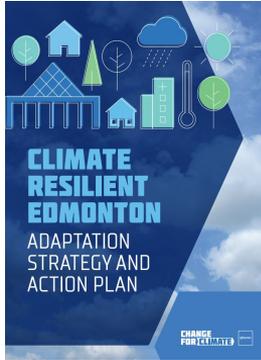
# Comparing Municipal Emissions

## Total GHG Emissions by City



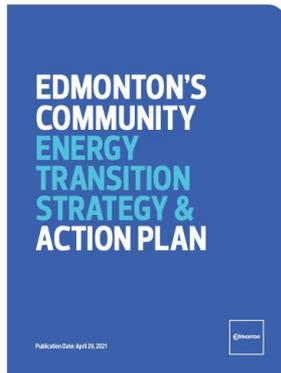
*Edmonton has one of the highest per person GHG emissions rates in the world*

# Progress



**80%**

CLIMATE ADAPTATION  
ACTIONS UNDERWAY



**80%**

ENERGY TRANSITION  
ACTIONS UNDERWAY

# Corporate Actions

## Energy Transition

- Solar on 12 City facilities with 9 more in progress
- 1 Emission Neutral Building
- 60 Electric buses and one Hydrogen bus
- Over 98,000 Street and alley light converted to LEDs
- Conceptual design for 85 EV chargers at 24 sites
- 100% of electricity offset with Renewable Energy Certificates (340,000 MWh/yr)

## Adaptation

- Emergency Response Centre Activation
- Identify climate risk and adaptation actions as part of asset management planning
- Urban forest diversification (species replacement)



# Community Actions

## Energy Transition

- 1,900+ residential solar installations supported by the Change for Climate Solar Program
- Downtown district energy
- Blatchford Carbon Neutral Development
- LRT expansion and Mass Transit planning for 1.25 million network

## Adaptation

- 280 neighbourhoods assessed for climate vulnerabilities
- City-wide wildfire and urban heat risk mapping
- \$25M of LID projects
- EPCOR flood mitigation efforts
- 5,164 new boulevard and open space trees
- Expansion of temporary outdoor water stations



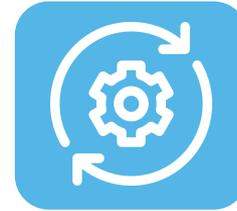
# Types of Climate Action



**Immediate Impact**



**Cumulative /  
Generational Impact**



**Systemic Change**

*Climate actions are not all equal in terms of impact, but all are necessary*

# Systemic Change

New voices in decision making

- Chief Climate Officer

Focus Areas of Systemic Change

- Climate Task Force Workplan

Organizational Review

- “Office of the Environment”

## GOVERNANCE AND DECISION MAKING

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POLICY AND BYLAW

---

BUILDING CAPACITY

---

CULTURE

---

PARTNERSHIP & ADVOCACY

---

GREEN ECONOMY

---

INTERSECTIONALITY

# Climate Resilient Planning and Development Framework

## HIGH LEVEL FRAMEWORK

- Outlines *what* and *when* climate will be integrated
- Directs the scale and pace for integrating climate into planning and development
- Due to council Q2 2024

## IMPLEMENTATION

- Will require engagement

Q2 2024

High Level  
Framework

Q3 2024 +

Making Changes/  
Implementation

## 2023 Perspectives

**74%** CONCERNED ABOUT CLIMATE CHANGE

**73%** AGREE ON THE NEED TO TAKE ACTION NOW

**95%** HAVE EXPERIENCED AT LEAST ONE EXTREME WEATHER EVENT IN THE PAST TWO YEARS

**45%** DISAGREE WITH PAYING A TAX LEVY

**34%** AGREE WITH PAYING A TAX LEVY

## Next Steps

- Continue Implementation
- Funding Opportunity Conversations
  - Dedicated Climate Fund (FCS01782)
  - Operating Budget Amendment 12 (OP12) Discussions
- Continue Advocacy and Partnership Efforts
- Up Next - Dedicated Climate Fund

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## **Dedicated Climate Fund - FCS01782**

## Background

- Community Energy Transition Strategy - established high level targets of reducing community carbon emissions:
  - 35% by 2025
  - 50% by 2030
  - Net zero by 2050 (corporation by 2040)
- Carbon Budget shows significant reductions are required to meet targets
- Motion: Options for a Dedicated Climate Fund, including potential parameters and funding amounts in alignment with the Energy Transition Strategy.

# Context Setting

Dedicated tax increase for Energy Transition Strategy

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Does not include Climate Resilience Adaptation Strategy investments

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High level estimates / long-range forecast - order of magnitude, not detailed costing

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Specific project details to be included in future budget discussions

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# Investments and Targets

<b>2024-2050 High Level Estimate</b> <i>Investment Required to Achieve Net Zero Emission Reductions by 2050 (Community)</i>	
Public & Private Investment	\$41.7 billion
Initiatives within City's Control	\$8.27 billion
City of Edmonton's Funding Share (1/3)	\$2.76 billion

# Investments by Pathway

		Operating & Capital Funding Requirements				
		by Pathway (in \$millions)				
Pathway		2024-2026	2027-2030	2031-2040	2041-2050	Total
1	Renewable & Resilient Energy Transition	8.3	130.9	612.8	691.8	1,443.8
2	Emissions Neutral Building	10.0	146.4	891.6	103.6	1,151.6
3	Low Carbon City and Transportation	185.4	495.2	2,578.1	662.7	3,921.4
4	Carbon Capture & Nature Based Solutions	68.2	167.8	826.5	693.0	1,755.5
<b>Total Funding Requirement</b>		<b>\$271.9</b>	<b>\$940.3</b>	<b>\$4,909.0</b>	<b>\$2,151.1</b>	<b>\$8,272.3</b>
<b>City Share (1/3)</b>		<b>\$90.6</b>	<b>\$313.4</b>	<b>\$1,636.3</b>	<b>\$717.0</b>	<b>\$2,757.4</b>

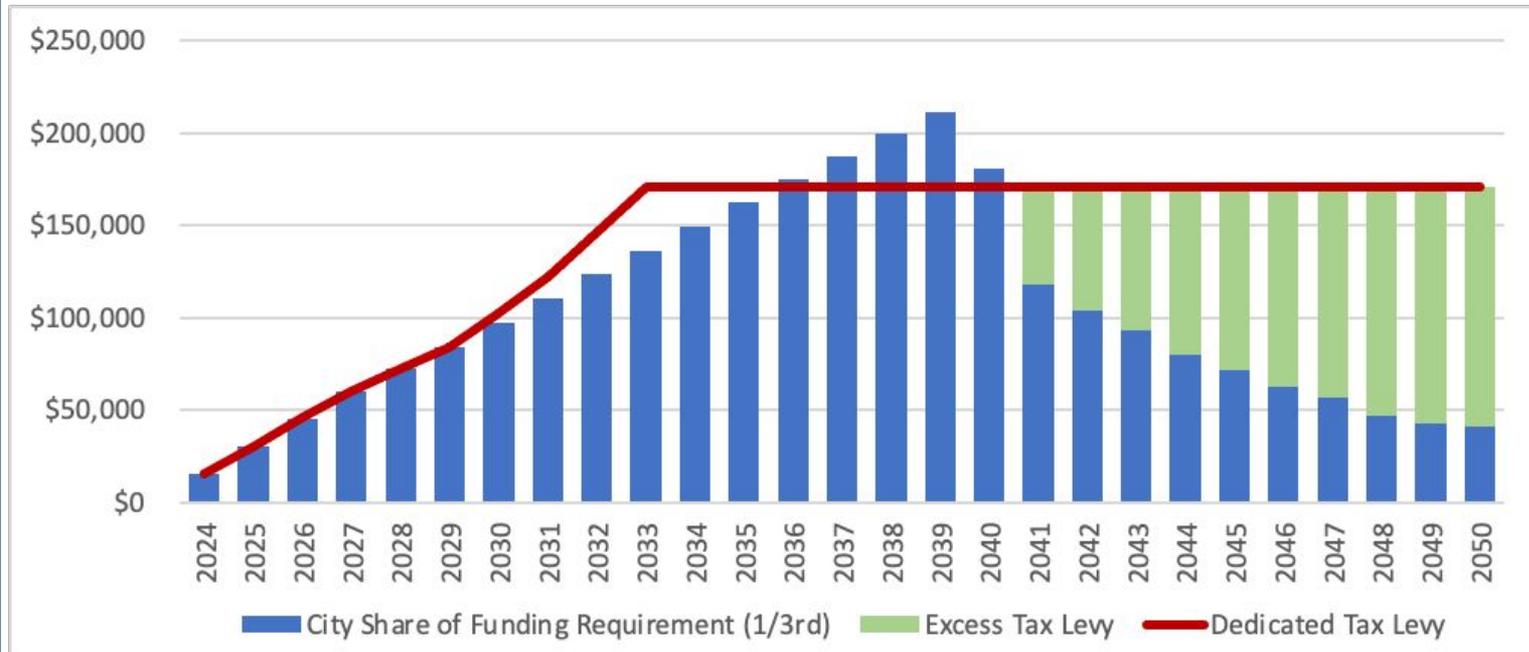
# 10 Year Dedicated Tax Increase

*To Create Dedicated Funding for the Energy Transition Strategy*

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total
Tax Levy Increase	0.80%	0.70%	0.70%	0.60%	0.50%	0.45%	0.65%	0.70%	0.80%	0.80%	<b>6.70%</b>
Incremental Funding (\$millions)	\$15.5	\$14.8	\$15.7	\$14.2	\$12.4	\$11.7	\$17.7	\$19.9	\$23.9	\$25.0	
Annual Ongoing Funding (\$millions)	\$15.5	\$30.2	\$46.0	\$60.2	\$72.6	\$84.3	\$102.0	\$121.9	\$145.8	<b>\$170.8</b>	

- 2033 - \$170.8M in annual base funding

# 10 Year Dedicated Tax Increase vs. Funding Requirement



- Excess tax levy after 2040
  - Further investment toward climate change initiatives
  - Reallocate towards other priorities
  - Reduce tax levy requirement

Questions?