

Corporate Climate Change Action Plan

PEDC

PDS 11- 2025

May 7, 2025

Why Develop a Climate Change Action Plan?

Partners for Climate Protection Program (PCP)

- PCP Members since 2009
- Corporate Climate Change Plan (2013)
- Council declared a climate emergency (2021)

PCP Framework



2023 – 2026 Council Strategic Priorities

Effective Region

Remaining an employer of choice by transforming service delivery in a way that is innovative, collaborative and fiscally-responsible.

Green and Resilient Region

Focusing on reducing our collective carbon footprint and preparing to adapt to climate change impacts by ensuring current and future infrastructure is resilient.

Equitable Region

Providing opportunities for a safe and inclusive Niagara by listening and responding to our current community needs and planning for future growth.

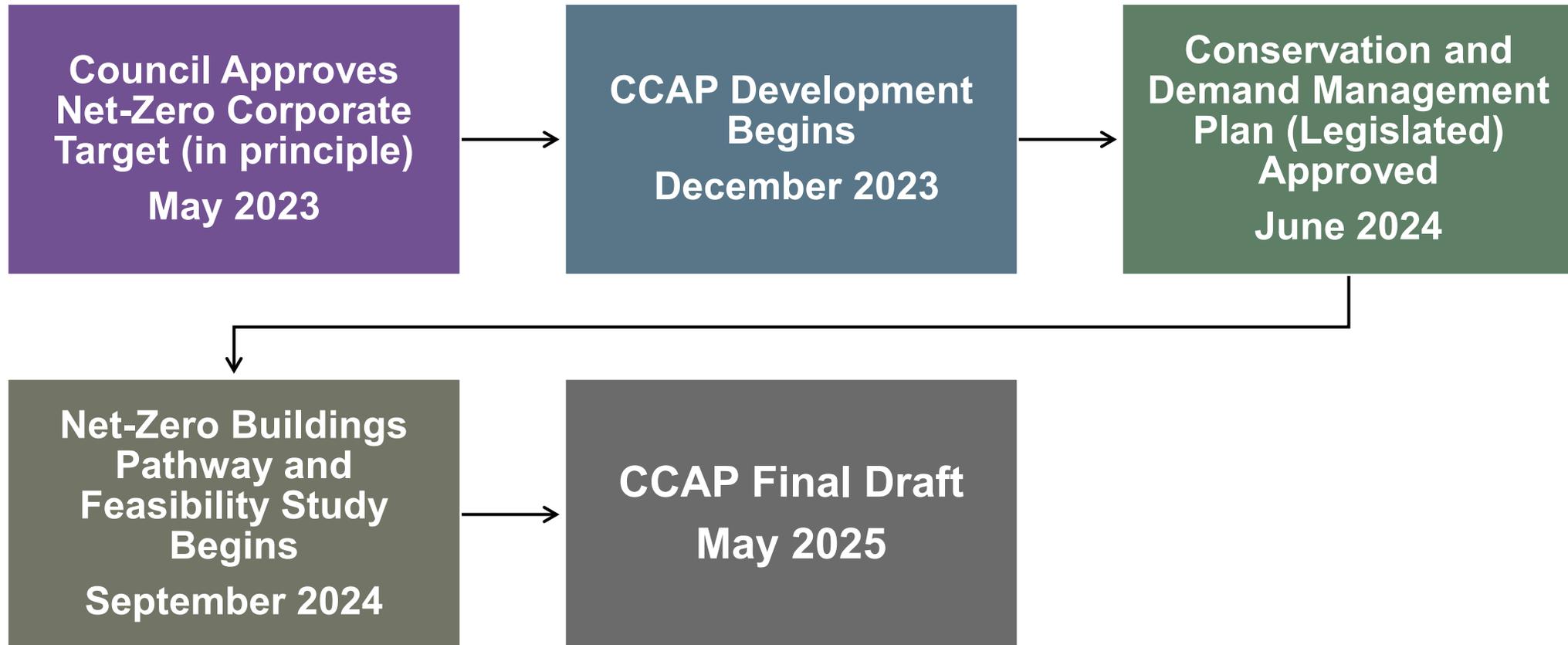
Prosperous Region

Advocating with senior governments for future growth and enhancing Niagara's transportation network to help support a diverse economy by creating a Region where new and existing businesses can thrive and grow locally, nationally and internationally.

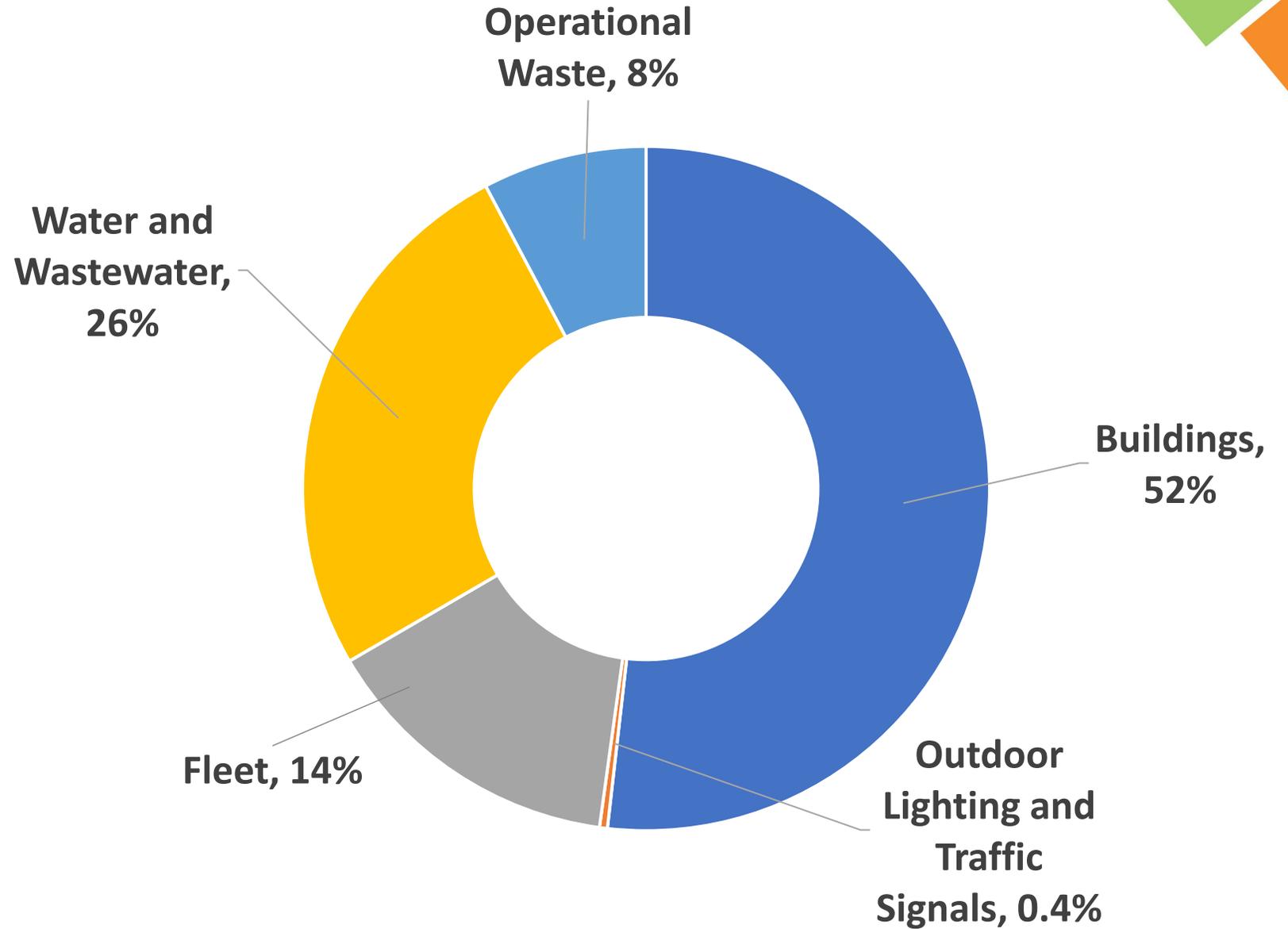
Council Approved Corporate Target

Net-Zero (in principle) Corporate emissions target by 2050.

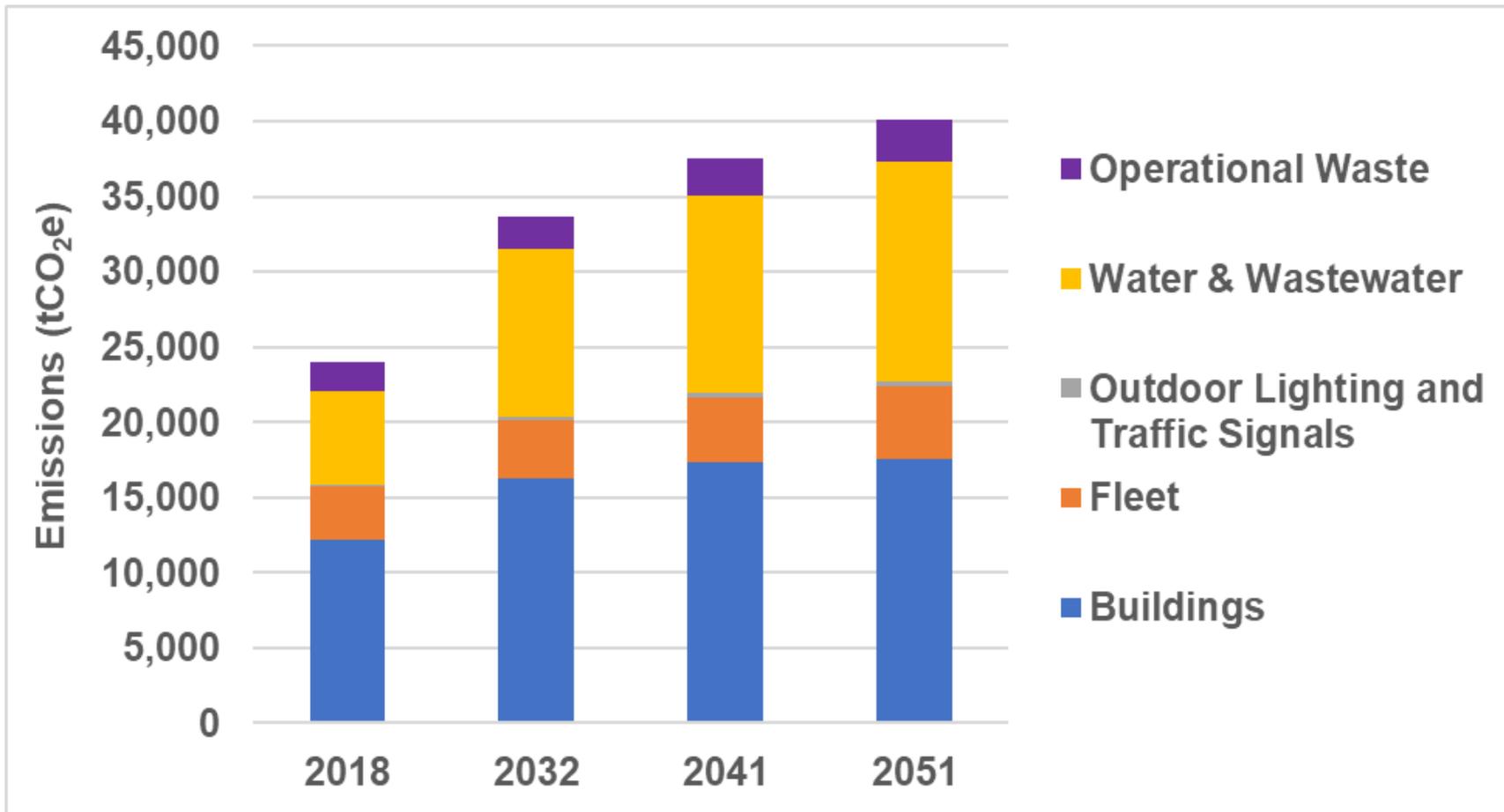
Climate Change Action Parallel Initiatives



Niagara Region's GHG Emissions Inventory (2018)



GHG Emission's 25 Year Forecast



67%
increase
in
corporate
emissions
(Business-As-Usual)

Plan Development

Engagement and Plan Input

- CCAP integrated into ongoing business operations
- Cross-corporate team input
- Staff surveys and expert discussions
- Alignment with Conservation and Demand Management Plan (CDMP) and best practices
- Includes municipal, regional strategies, and funding opportunities
- Collaboration with Niagara Climate Change Municipal Community of Practice (NCCMCP)
- Climate action embedded as a continuous, routine commitment

Challenges to Transformation



COST

**Higher
Budget limits**



TECHNOLOGY

**Expensive
Underdeveloped
solutions**



OPERATIONS

**Needs long-term
vision
Collaboration
Stability**



UNKNOWNNS

**Tariffs
Carbon taxes
Policy changes**

CCAP Overview

25-year plan with 3 proposed phases of actions:

- Short-term (5 years)
- Medium-term (5-15 years)
- Long-term (15+ years)

Corporate Climate Change Action Plan

Regional Municipality of Niagara



Niagara Region

May 7, 2025

Niagara Region



Niagara Region



CCAP Action Implementation Phase 1

Short-term (0-5 years) – Foundational Policy Development and Strategic Investments:

Examples:

- Develop an education and awareness plan
- Apply a climate lens
- Policy development (e.g., sustainable procurement policy) and refinement
- Evaluate opportunities for building consolidation
- Planned CDM Projects
- Green Fleet Plan and Policy



CCAP Action Implementation Phase 2

Medium-term (5-15 years) – Policy and Process with Initial Capital Investments:

Examples:

- Planned CDM projects
- Review policies for energy management at leased facilities
- Fleet transition
- Complete 5-year CCAP updates



CCAP Action Implementation Phase 3

Long-term (15+ years) – Intensive Capital Investment and Tackling the Balance:

Examples:

- Capital Intensive planned CDM projects
- “Last-mile” emissions
- Refine existing plans and policies



Example Climate Action Projects

CE&FM Project: CW Roof Upgrade

Environmental

- Added insulation will eliminate ~10,400 m³ of natural gas annually, reducing emissions by 20 metric tonnes of CO₂ equivalent
- 6.5% reduction of the building's total emissions

Health and Quality

- Building resiliency, and increased comfort for occupants

Economic

- Roof at end-of-life and has failed in various locations
- Updating roof system to current building code requirements with additional insulation



CE&FM Project: Welland Child Care HVAC replacement

Environmental

- Hybrid Air Source Heat Pump with Boiler backup will eliminate ~7,800 m³ of natural gas annually
- Reducing emissions by 15 metric tonnes of tCO₂e
- 69% reduction of the building's total emissions

Health and Quality

- Building resiliency and increased comfort for occupants

Economic

- HVAC unit at end-of-life
- Investing \$15K for the GHG reducing system is 4.5% of the project budget
- \$1,260 reduced operating cost



Community Services Long-Term Care Homes: Ozone System Project

Environmental

- Saves ~14,000m³ of natural gas annually
- 56% reduction in hot water and gas use, 10% less water, 5% less electricity, fewer chemicals

Health and Quality

- Enhanced disinfection without added chemicals
- Improved hygiene in laundry services

Economic

- Estimated \$25,000 savings per facility (4) over 5 years
- Total projected savings: \$100,000 across all 4 homes



Water and Wastewater: Dual Fuel High Efficiency Boilers

Environmental

Utilizing digester gas (renewable energy) at wastewater facilities reduces emissions by 1,140 tCO₂e

- Saves ~177,400 m³ of natural gas annually
- Adds 335 tCO₂e in additional reductions from improved efficiency

Health and Quality

- Improved reliability for plant operations to maintain wastewater treatment quality

Economic

- ~\$70,000 cost benefit



Cost to Decarbonization

Integrating GHG Reduction into Operations

- Aligned with asset renewal/end-of-life replacement
- Adhering to current building codes and standards
- Seeking external funding opportunities
- Developing business cases based on risk, cost savings, and building resiliency



Plan Benefits and Future Froward

01

RESILIENCE AND
COST
EFFICIENCY

02

SUSTAINABLE
INFRASTRUCTURE

03

HEALTH AND
COMMUNITY
BENEFITS

04

STRATEGIC AND
FISCAL
RESPONSIBILITY

What Will It Require to Achieve Our Goal?

Embed a Climate Lens Across All Decisions

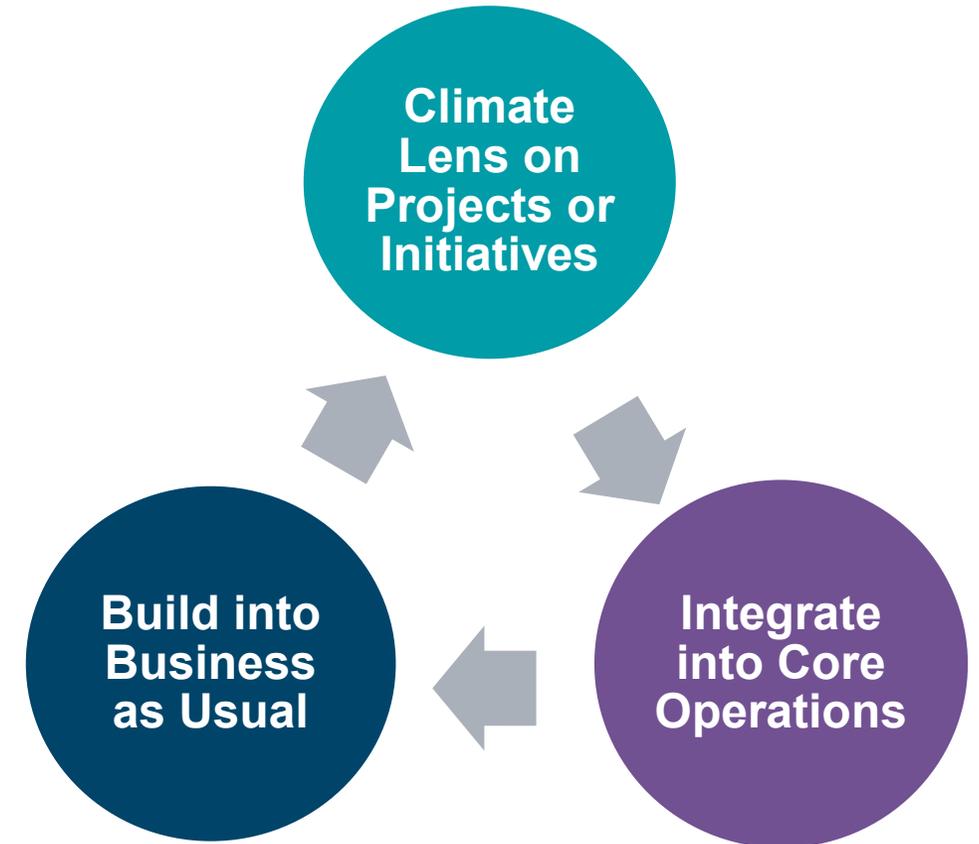
- Ensure every project, policy, and investment is evaluated for its climate impact.

Integrate Climate Action into Core Operations

- Make sustainability a central consideration in daily operations and long-term planning.

Transform Sustainability into Business as Usual

- Move beyond isolated initiatives to embed climate action as a standard practice across all teams and processes.



Council Report Recommendations

1. That the proposed Corporate Climate Change Action Plan (CCAP), attached as Appendix 2 to Report PDS 11-2025, **BE APPROVED**; and
2. That Report PDS 11-2025 **BE CIRCULATED** to the Local Area Municipalities.

Thank you!

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