

Michael Oliveri

From: Peter Hyman [REDACTED]
Sent: Monday, September 22, 2025 2:48 PM
To: Michael Oliveri
Subject: Fw: Options for Fulfilling ECDM Obligations Under O. Reg. 25/23 - Prepared in Support of Peter Hyman's Delegation – September 23, 2025

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Here is a final document in support of my delegation.

Peter Hyman

----- Forwarded Message -----

From: Margaret Braun [REDACTED]
To: mayor@cambridge.ca <mayor@cambridge.ca>; liggettj@cambridge.ca <liggettj@cambridge.ca>; shweryh@cambridge.ca <shweryh@cambridge.ca>; devinem@cambridge.ca <devinem@cambridge.ca>; kimpsonc@cambridge.ca <kimpsonc@cambridge.ca>; earnshawr@cambridge.ca <earnshawr@cambridge.ca>; robertss@cambridge.ca <robertss@cambridge.ca>; coopera@cambridge.ca <coopera@cambridge.ca>; hamiltons@cambridge.ca <hamiltons@cambridge.ca>; ermetan@cambridge.ca <ermetan@cambridge.ca>; dcraig@regionofwaterloo.ca <dcraig@regionofwaterloo.ca>; pwolf@regionofwaterloo.ca <pwolf@regionofwaterloo.ca>; mantond@cambridge.ca <mantond@cambridge.ca>; calderd@cambridge.ca <calderd@cambridge.ca>
Cc: Peter Hyman [REDACTED]
Sent: Monday, September 22, 2025 at 09:51:39 a.m. EDT
Subject: Options for Fulfilling ECDM Obligations Under O. Reg. 25/23 - Prepared in Support of Peter Hyman's Delegation – September 23, 2025

Report to Cambridge City Council

Subject: Options for Fulfilling ECDM Obligations Under O. Reg. 25/23
Prepared in Support of Peter Hyman's Delegation – September 23, 2025

Executive Summary

This report presents three viable policy options for the City of Cambridge to meet its legal obligations under Ontario Regulation 25/23 (Energy Consumption and Demand Management Plans). Drawing on the 2025–2029 ECDM Plan and public best estimates, it compares costs, administrative burdens, and expected outcomes for each path, with a final recommendation for Council.

GHG Reduction Targets and Key Assumptions

The ECDM Plan states:

"The City currently has achieved 11% emissions reduction from the 2010 baseline."

"An estimated maximum of 30% emissions reductions could be achieved through future waste, fleet, and facility projects."

"It is estimated that the City would release 2,700 tCO₂e in 2050 – a reduction of 69%

compared to 2010 levels. In order to reach the Council-approved (2019) target of 80% emissions reductions by 2050, offsets or credits would need to be purchased." (p. 17)

From this, we calculate:

- **2010 baseline emissions:** ~8,710 tCO₂e
(2,700 / 0.31 = ~8,710)
- **Targeted reductions:**
 - 30% (~2,613 tCO₂e) through projects
 - 11% (~958 tCO₂e) already achieved
 - Remaining ~39% (~3,394 tCO₂e) via offsets or future action

Estimated **cost of carbon credits** (market average):

- Low: \$20/tonne
- High: \$80/tonne

Offset costs to cover remaining 39%:

- 3,394 tCO₂e × \$20 = **\$67,880/year**
- 3,394 tCO₂e × \$80 = **\$271,520/year**
- 20-year estimate (2030–2050): **\$1.36M – \$5.43M**

Cambridge's Emissions in Perspective

The 2010 baseline emissions total of ~8,710 tonnes of CO₂e, while used to set ambitious climate targets, is negligible at broader scales:

| Reference Point | Cambridge's Share (8,710 tCO ₂ e) |
|---------------------------------------|--|
| Canada's total emissions | 0.00151215% of 576,000,000 tCO ₂ e |
| Global human emissions | 0.00002419% of 36,000,000,000 tCO ₂ e |
| CO ₂ in Earth's atmosphere | 0.00000042% of 2,060,000,000,000 tonnes |
| Tree equivalent (annual) | ~113,230 mature trees |
| Share of all trees in Canada | 0.00003561% of ~318 billion trees |
| Trees per resident (140,000 pop.) | ~0.8 trees per person |

Even full elimination of these emissions would have **no measurable global impact**. This underscores the need to ground decisions in **cost-effective local benefits**, not symbolic global metrics.

Option 1: Business-as-Usual – Minimal Compliance with O. Reg. 25/23

- Continue upgrades to facilities and fleet as part of asset renewal
- Report every 5 years as per regulation
- No PCP milestone tracking or offset purchases

Pros:

- Fully compliant with provincial law
- Low cost and administratively manageable
- Avoids NGO-driven targets not locally consented to

Estimated Cost (2025–2050): \$3M–\$7M

Primarily staff, energy reporting, and ongoing capital upgrades

Option 2: Maintain PCP Membership, Reduce Commitments

- Keep PCP membership for appearances or grant access
- Defer offsets and aggressive capital projects
- Use plan only as a soft guide

Pros:

- Lowers political risk
- Maintains access to some climate grants

Cons:

- Maintains reporting burden
- Limited climate outcomes

Estimated Cost: \$20M–\$40M

Option 3: Full PCP Alignment with Offsets

- Achieve 80% GHG reduction by 2050
- Requires purchasing offsets (up to 3,394 tCO₂e/year)
- PCP Milestones 3–5, annual reporting, and major capital investment

Pros:

- Aligns with global climate frameworks
- Eligible for climate branding and awards

Cons:

- High cost per tonne (\$4,900–\$8,500/tCO₂e)
- Low impact on actual global emissions

Total Cost (2025–2050): \$35M–\$60M

(Offsets: \$1.3M–\$5.4M + direct capital + admin)

Supporting Quote from ECDM Plan

“An offsets and credits policy development project (C10) within the ECDM Plan will consider the advantages and disadvantages in more detail.” (p. 17)

Despite acknowledging the financial implications, the plan provides **no cost estimates** or offset purchasing strategy.

Recommendation

We recommend Council pursue **Option 1: Business-as-Usual Compliance** with Ontario's ECDM regulation:

- Reduces unnecessary costs
- Meets all legal obligations
- Maintains energy efficiency progress via standard upgrades
- Avoids dependency on global climate frameworks

This approach prioritizes local accountability, infrastructure renewal, and fiscal integrity, while allowing Cambridge to remain agile in its future planning.

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