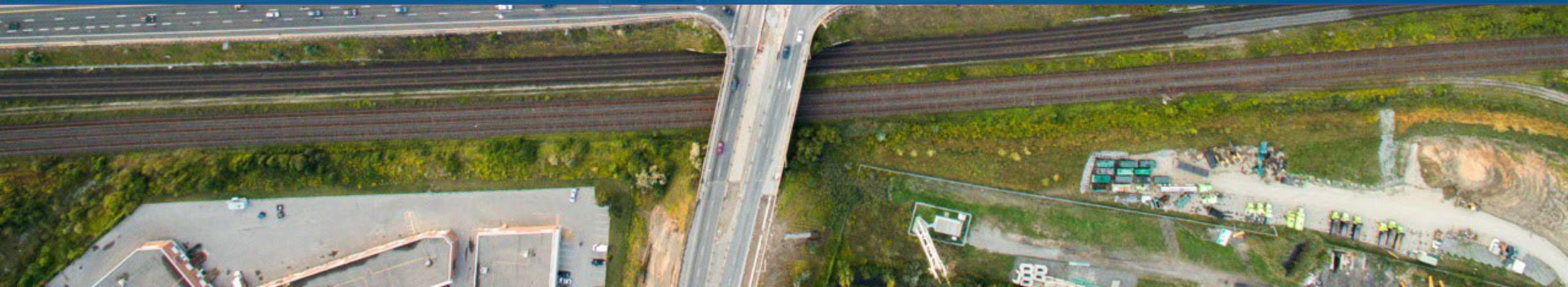




Durham Greener Buildings & District Energy Strategy

Presentation to Community Growth and Economic Development Committee

April 7th 2026



Climate, Growth and Infrastructure Context

- Buildings account for ~33% of community GHG emissions
- Population and employment growth straining energy systems

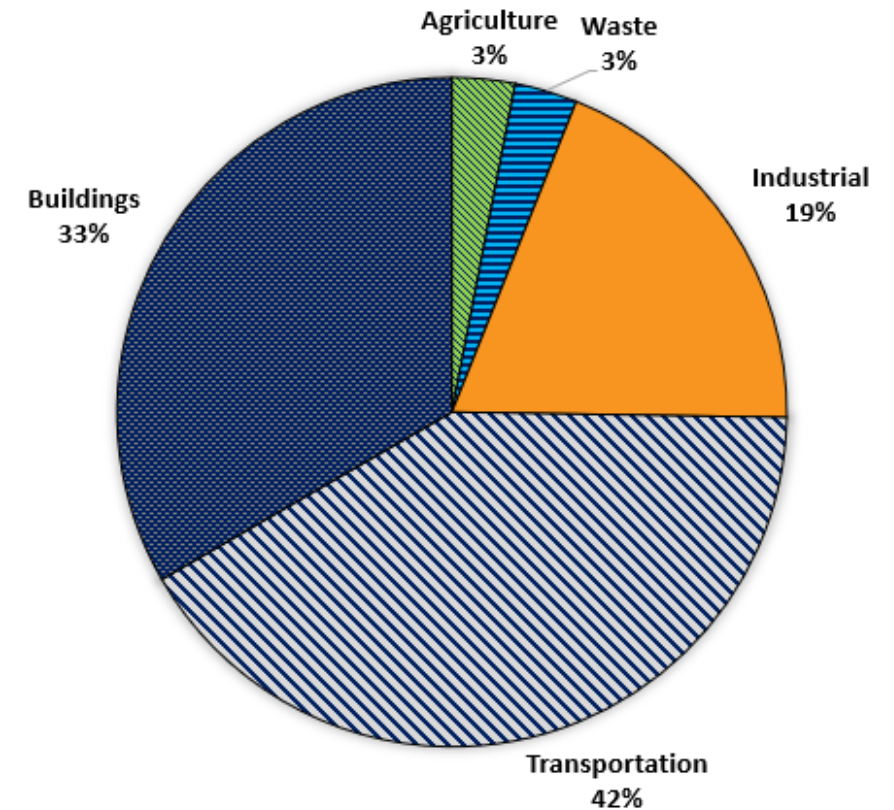
Focus areas:

- **Existing buildings** - Durham Greener Buildings (performance, retrofits)
- **New growth areas** – district energy (low carbon systems in high-density areas)

Supports:

- Improved building performance & emissions reductions
- Energy security and resilience
- Long term cost stability

Durham Community-wide GHG Emissions by Sector in 2024
(Source: Toronto Atmospheric Fund)



Durham Greener Buildings – Program Overview

- Launched in 2024 (3-year program)
- Voluntary benchmarking and capacity-building program
- **Supports:**
 - Energy benchmarking – supports compliance with Ontario’s Energy & Water Reporting and Benchmarking (EWRB) Requirement & Broader Public Sector (BPS) Reporting
 - Performance tracking
 - Retrofit planning
 - Focus on public sector and large buildings



Durham Greener Buildings – Results

- 545 Broader Public Sector (BPS) Buildings Participated (12% increase in enrollment)
- Delivered:
 - Technical support and training
 - Workshops and engagement activities
 - Recognition and performance initiatives – **Durham Greener Buildings Challenge**
- Measurement is foundational to managing energy performance and enabling retrofit action



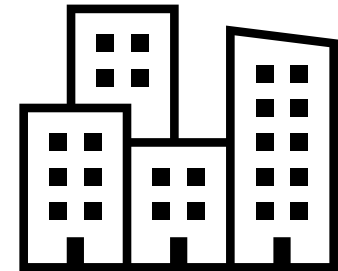
Durham Greener Buildings – Key Insights

- Technical support is critical to participation
- Data quality drives outcomes
- Sector-specific approaches required
- **Key barriers:**
 - Limited awareness on energy benchmarking
 - Data access challenges
 - Split incentives in multi-tenant buildings



Durham Greener Buildings – Phase 2 (2026-2029)

- Continue core program delivery
 - Energy benchmarking, support BPS buildings, improve data quality, expand engagement efforts
- Expand focus to:
 - Community housing
 - Multi-unit residential
- Strengthen alignment with utility programs - connect building owners with retrofit funding, incentives, and technical support.



Durham Greener Buildings – Phase 2 Enhancements

- Enhanced technical support and data quality
- Improved access to incentives, financing, and retrofit pathways
- Expanded utility partnerships for outreach and delivery
- New tools to streamline benchmarking and reporting
- Focus on community housing and Broader Public Sector

Outcomes:

- Improved building performance and asset management
- Supports cost savings & GHG reduction
- Increased retrofit readiness and implementation
- Reduced GHG emissions
- Positions Region for scalable retrofit delivery



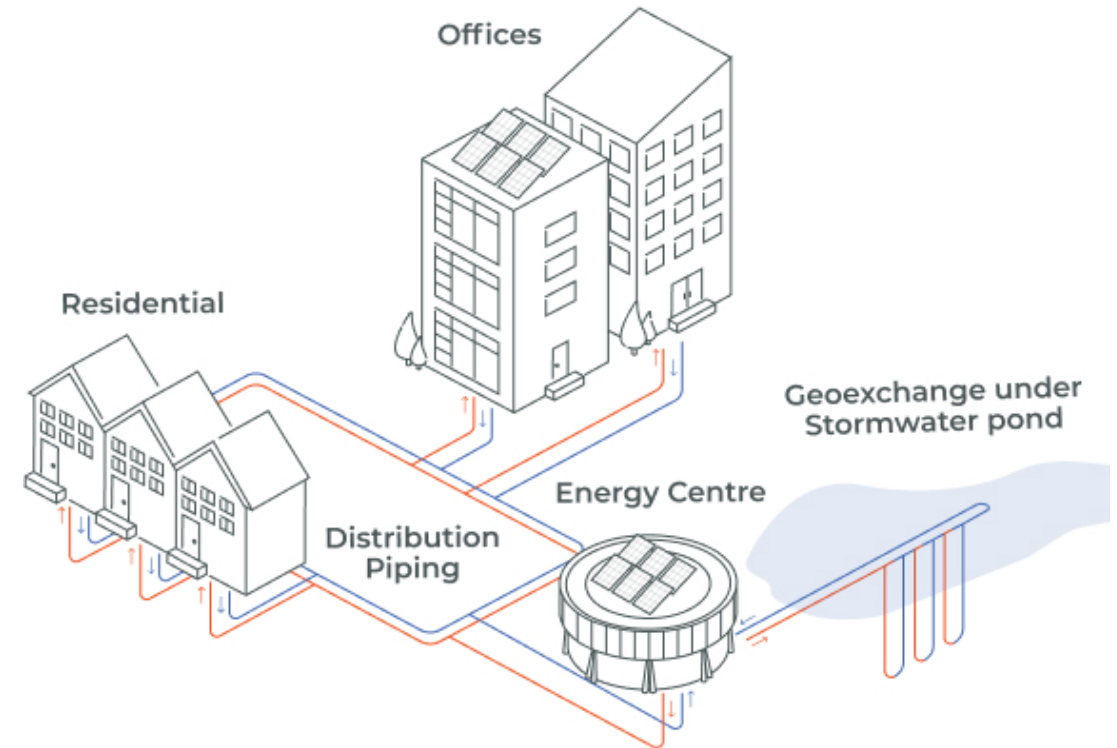


Durham District Energy Strategy & CTOC District Energy Update

- Report provides an update on two related initiatives:
 - Region-wide District Energy Strategy
 - Courtice Transit Oriented Community (CTOC) District Energy System
- Informational update only - no new Council direction requested
- Aligns with broader work on building decarbonization and infrastructure planning

What is District Energy?

- Centralized heating/cooling systems serving multiple buildings through shared infrastructure
- Enables:
 - Use of low-carbon and waste heat sources
 - More efficient, resilient thermal infrastructure
- Most effective in:
 - High-density, mixed-use areas
 - Greenfield developments where infrastructure can be coordinated upfront



Source: Blatchford Renewable Energy Utility

Durham District Energy Strategy

- Advancing a Region-wide District Energy strategy to:
 - Identify and prioritize future district energy opportunities
 - Sequence where detailed feasibility studies should occur
- FCM funding secured (\$200,000) to support development
- **Key work underway:**
 - Heat mapping and demand analysis
 - Wastewater heat recovery analysis
 - Identification of priority implementation areas
- Focused on Strategic Growth Areas and Major Transit Station Areas across Durham
- Completion targeted for **Q2 2027**



Durham District Energy Strategy – Focus Areas

Area Municipality	Location/ Description
Town of Ajax	Focused in the Ajax Downtown Regional Centre Area and the Ajax GO Station Secondary Plan Area
Municipality of Clarington	Focused in the Courtice Transit-Oriented Community Area and the Bowmanville West Urban Centre and Major Transit Station (GO Train) Area
City of Oshawa	Focused in Downtown Oshawa Urban Growth Centre
City of Pickering	Focused in Pickering City Centre Area and Employment Lands
Town of Whitby	Focused in Downtown Whitby Community Secondary Plan area and Whitby GO Station MTSA

CTOC District Energy System – Why Courtice?

Strategic Site Selection

CTOC is a greenfield transit area allowing integration of district energy infrastructure from the start

Proximity to Energy-from-Waste Facility

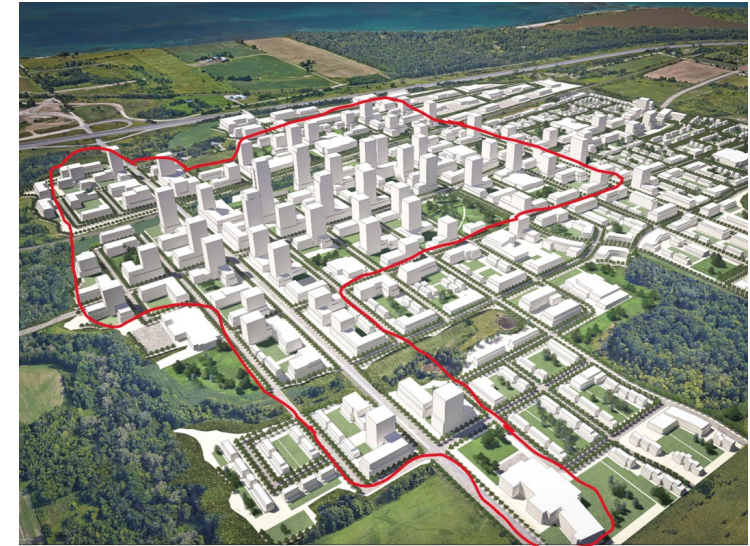
Close location to Durham York Energy Centre enables use of recovered heat as low-carbon energy

Feasibility Study Insights

Study identified heat recovery as preferred supply with phased implementation around Courtice GO Station

Regional Strategy Implications

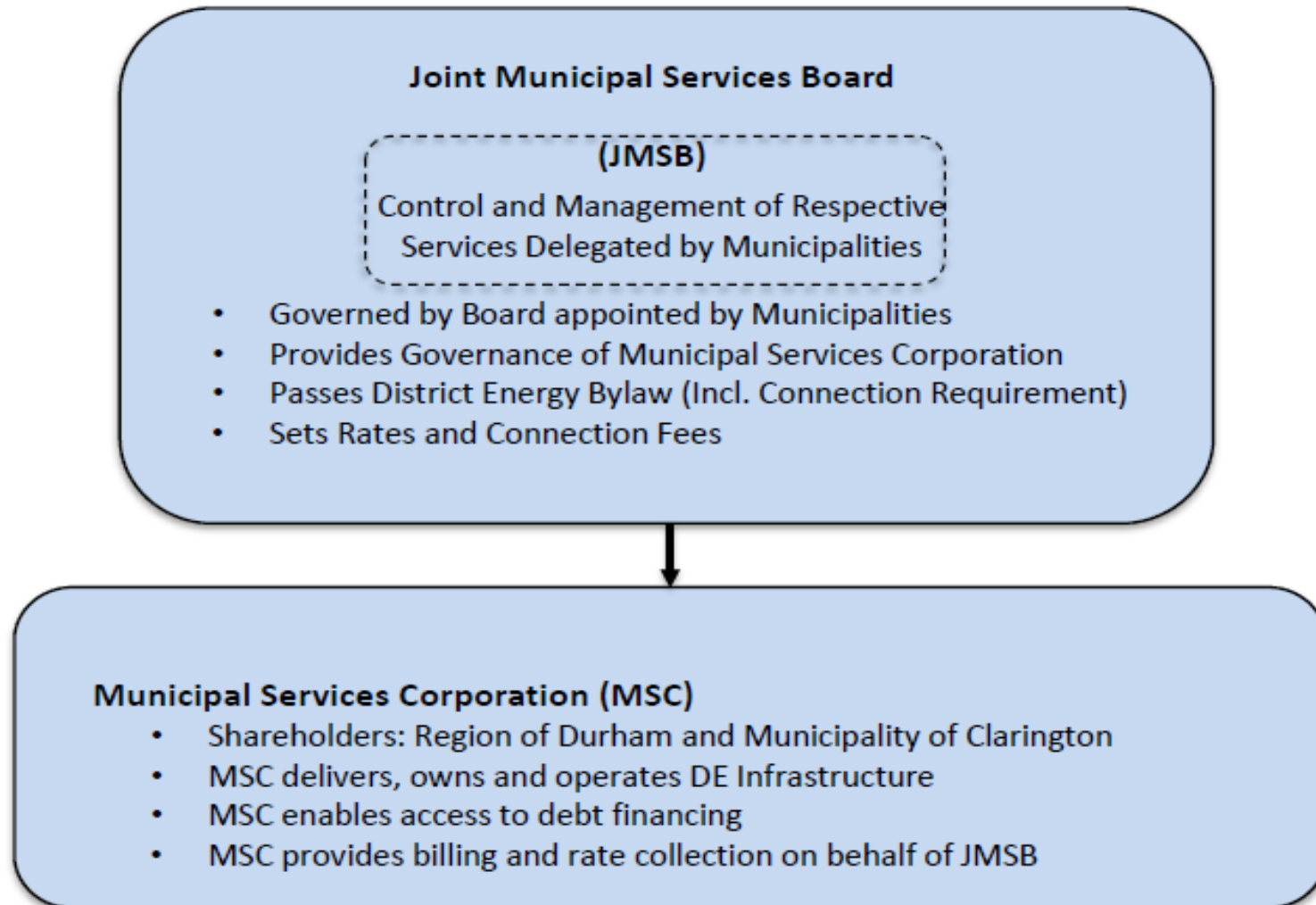
Courtice project serves as a model for future district energy systems in Durham region



CTOC DES: Progress since last Council update

- Continued refinement of:
 - Technical and financial assumptions
 - Comprehensive business case for a Municipal Services Corporation
- District energy supportive policy included in the Clarington adopted CTOC Secondary Plan
- RFEOI issued:
 - Strong market interest
 - Emphasis on clear ownership and governance structures
- Ongoing engagement with:
 - Landowners and developers
 - Metrolinx (GO Station Coordination)
 - MSIFN/Minogi Corp

Durham-Clarington Joint Ownership Model



Timing, Dependencies, and Next Steps

- **Project timing influenced by:**
 - Development market conditions
 - Courtice GO Station delivery timelines
 - Partner alignment
- **Current focus:**
 - Finalize business case and MSC framework
 - Continuing partner and financing discussions
 - Preparing for a Council decision in Q1 2027



Thank You

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