IMPLEMENTATION PLAN
2023

WHITBY

Climate Emergency Response Plan

# Phase 2: Mitigation

whitby.ca/ClimateChange

Whitby

# Context

The purpose of the following short-term Implementation Plan is to actively guide progress from 2024 to 2030 on the low-carbon pathway outlined in the Climate Emergency Response Plan (CERP) Phase 2: Mitigation Plan (Mitigation Plan). It is designed to generate momentum on each low-carbon action in the Mitigation Plan by providing a comprehensive list of actions and associated sub-actions for starting the implementation processes, however the Town of Whitby (Town) and community will need to continue implementing actions beyond 2030. As circumstances evolve (e.g., community champions are identified, funding becomes available, technologies change), the Implementation Plan should be updated by the Town to reflect new opportunities and advancements.

The Town's Council set a target to reach community-wide net-zero greenhouse gas (GHG) emissions by 2045. To meet this target, Whitby will need to eliminate 0.84 megatonnes of carbon dioxide equivalent emissions (MtCO2e) by 2045 (or 841,079 tonnes of carbon dioxide equivalents [tCO2e]) across the community. In addition, Council approved the following short-term and medium-term targets:

- 20 percent greenhouse gas emissions reduction by 2025; and
- 40 percent greenhouse gas emissions reduction by 2030.

The low-carbon scenario models the projected future emissions, whereas the Implementation Plan presents the low-carbon pathway outlining the steps and strategies required to achieve these future emissions. The sub-actions outlined in this Implementation Plan are designed for the Town, local businesses, industry, and residents to implement the low-carbon actions modelled in the Mitigation Plan's low-carbon scenario. While the direction of the low-carbon pathway is driven by the target of net-zero emissions by 2045, the specific strategies identified in the Implementation Plan focus on the 2025 and 2030 interim targets and setting the stage for long-term emission reductions. These strategies were influenced by several factors, including:

- Research on best practices;
- Industry-leading expertise and knowledge;
- Input from the Project Team, which consisted of representatives for the Town and Region of Durham, and Elexicon Energy; and
- Input from the community received from community focus groups and survey responses.

## How the Guide Is Organized

The Implementation Plan is divided into two sections. The first section details Governance and Leadership actions Town staff need to undertake to establish the internal capacity required to manage the implementation of the actions. The second section details actions that are specific sector changes needed, that are referred to as the Big Moves that need to be undertaken to decrease emissions, which include:

1. Decarbonizing buildings;
2. Generating renewable energy;
3. Enhancing low-carbon transportation;
4. Reducing waste emissions; and
5. Reducing industrial and agricultural emissions.

### KEY DEFINITIONS

Each Big Move is divided into the Action Overview and the Detailed Sub-Actions. The Action Overview section details the action, 2045 modelled low carbon targets, 2030 modelled low carbon targets[1], greenhouse gas (GHG) impact, and the total modelled investments. The Detailed Sub-Actions section provides a description of the sub-action, the anticipated internal impact, proposed project lead, sponsors, and supports, the implementation timeframe, and tracking metrics. Due to the overlap between funding opportunities and interested and affected parties, a summary for each of these has been provided for each Big Move sector. The following section provides key definitions.

**Funding and Interested and Affected Parties**

Funding Opportunities: Potential funding opportunities the Town and community members can access to fund the actions.

Interested and Affected Parties: Organizations that have a vested interest in these actions and should be engaged and/or informed during implementation.

[1] The Implementation Plan outlines sub-actions designed to guide the Town's progress through 2030. Since the implementation commences in 2024, the Implementation Plan does not provide the modelled low-carbon targets linked to the 2025 interim goals. It is presumed that the initial annual GHG reporting will take place in 2025 or subsequent years.It is important to note that the actions within each Big Move sector are interconnected and mutually reinforce one another, as there is considerable overlap between the programs, initiatives, policies, and infrastructure recommendations outlined in this Plan.

### Action Overview

Action: The title of the action that helps achieve the Big Move identified in the low-carbon scenario.

2045 Modelled Low Carbon Target: A description of the low-carbon scenario's 2045 modelled target related to the action.

2030 Modelled Low Carbon Target: The 2030 interim low-carbon scenario's modelled target provides the Town with an interim target to track GHG emissions reductions against.

GHG Impact: The impact of GHG emissions reduction of the action based on the following categories:

- Enabler: Enables GHG emissions reductions
- Low impact: <1000 tCO2e reduction by 2030
- Medium impact: 1,000 tCO2e - 30,000 tCO2e reduction by 2030
- High impact: >30,000 tCO2e reduction by 2030

Total Modelled Investment (2023 - 2030[2]): The estimated funding required across all sectors between 2023 and 2030 to implement the action and meet the low-carbon scenario's 2045 modelled target. The investment costs can be provided by a variety of sources, such as funding opportunities identified in the Implementation Plan (i.e., these costs are not solely borne by the Town). This is a high-level estimate that may change with further study and action refinement. Additional actions and investments will need to be continued from 2030 and 2045.

### Detailed Sub-Actions

Sub-Actions: A brief description of the policies, programs, initiatives, infrastructure, advocacy, and education required to implement the actions.

- Policies: Developed by the Town, and approved by Council.
- Programs: Ongoing efforts by the Town or private, not-for-profit, or other sector, with staff and financing to support the efforts.
- Initiatives: A study or project undertaken by the Town or by private, not-for-profit, or other sectors. These have a specific focus and set time period, and can be accomplished either collaboratively or individually.
- Infrastructure: Physical asset developed by the Town, or by the private, not-for-profit, or other sectors.
- Advocacy: Activity undertaken or supported by the Town that demonstrates leadership or advocates for change.
- Education: Activity undertaken by the Town that educates community members on the implementation actions or mechanisms, and/or feasibility of implementation in the community.

Internal Impact: Summarizes the anticipated internal impacts of each sub-action. These include resources to initiate the action; internal communications and engagement fees estimated from the Town's previous outreach campaigns; and anticipated costs to be incurred by the Town to implement Town-led initiatives, such as consulting fees to complete feasibility studies. This is an initial estimate, subject to change as additional investments may be necessary following further study and refinement of actions. In addition, many of the initial steps of the actions are to investigate opportunities and begin planning for specific sub-actions. As opportunities are investigated, the Town will better understand what additional investments need to be made into programs, which can be integrated into the Town's annual budget review process. These could include additional investments into but not limited to the pilot E-bike library, Property Assessed Clean Energy (PACE) programs, and circular economy initiatives.

Project Lead, Sponsors, and Support: Highlights the roles and responsibilities of the Town, potential project leads, sponsors, and supports for each action.

- Project Lead: Organization responsible for executing and overseeing the sub-action from initiation to completion. The project lead's primary role is to manage project activities, resources, and risks. They act as the central point of communication for the action.
- Project Sponsor: Organization required to champion the action. They will need to be engaged to ensure the action is implemented, and may be responsible for providing funding.
- Project Support: Organization with a range of roles and functions that assist the project lead and the project sponsor in various aspects of the action.

Time Frame: Highlights the timeframe for initiating and planning the project. In cases where the project must be implemented or completed in order for another project to begin, target implementation and completion dates are provided using quarters and years. If a project does not need to be initiated until later dates, the target year is provided, however this can be further refined as the Town completes annual work plans.

Tracking Metrics: The method and measurement unit for measuring the impact of the action taken, All metrics should be analyzed on an annual basis for those actions that are being actively implemented.

[2] The financial analysis used 2020 as the baseline and projected investments starting from 2023, under the assumption that the Mitigation Plan would be adopted and initiated in 2023. Although certain activities will be carried out in 2023 (such as Action 1.1 and Action 1.2), the implementation of the Big Moves will not commence until 2024.

# Section One: Governance and Leadership

This first section of the CERP Phase 2: Mitigation - Implementation Plan focuses on building the Town's internal capacity to administer the actions associated with the Big Moves identified in the low-carbon scenario. The Town's Sustainability and Climate Change team will be responsible for overseeing and planning the implementation of CERP Phase 1: Resilience and CERP Phase 2: Mitigation. Establishing this internal capacity can be achieved by implementing the Governance and Leadership actions outlined below. These actions include updating the CERP Phase 1: Resilience - Implementation Plan with mitigation considerations (completed in 2023), monitoring and reporting on the Mitigation Plan, and monitoring and applying for finance and funding opportunities.

## ACTION 1.1 UPDATE THE GOVERNANCE AND LEADERSHIP ACTIONS OUTLINED IN THE CLIMATE EMERGENCY RESPONSE PLAN (CERP) PHASE 1: RESILIENCE - IMPLEMENTATION PLAN TO INCLUDE CLIMATE CHANGE MITIGATION CONSIDERATIONS (NOTE: THIS HAS BEEN COMPLETED).

| SUB-ACTION | INTERNAL IMPACT | TIME FRAME | TRACKING METRIC(S) |
|---|---|---|---|
| 1.1.1 Policy: The following CERP: Resilience - Implementation Plan actions were updated with mitigation considerations:<br>• Action 1.1: Action 1.1.2, Action 1.1.4, Action 1.1.5, Action 1.1.6<br>• Action 1.2: Action 1.2.4<br>• Action 1.5: Action 1.5.6, Action 1.5.7<br>• Action 1.7: Action 1.7.2 | Internal impacts for the updated actions have been identified in the CERP Phase: Resilience - Implementation Plan | Prior Council adoption | Complete: CERP: Phase 1 - Resilience's Implementation Plan updated to include mitigation considerations |

## ACTION 1.2 MONITOR AND REPORT ON CLIMATE CHANGE MITIGATION.

Due to the uncertainty in future GHG emissions, technological changes, and the remaining residual emissions at 2045 in the low-carbon scenario, adaptive management of the Mitigation Plan's implementation will be critical.

The Town is recommended to develop a cross-departmental roundtable of Town, Region of Durham and Elexicon Energy staff to oversee and coordinate the implementation of CERP Phase 1: Resilience and CERP Phase 2: Mitigation. The roundtable is intended to ensure a collaborative and coordinated approach to implementing the CERP, and provide an opportunity for the Town's Sustainability and Climate Change Division to host routine check-ins with other departments and teams who are involved in implementing the CERP Phase 1 and Phase 2 actions.

The Town already reports annually on its net-zero emissions progress through the Carbon Disclosure Project (CDP), a not-for-profit that runs the global disclosure system for investors, companies, cities, states, and regions to manage their environmental impact. The sub-actions identified in the monitoring and reporting section will assist the Town in future submissions by providing insight into the effectiveness of programs, key trends, GHG emissions reductions, and tracking metrics.

| SUB-ACTION | INTERNAL IMPACT | TIME FRAME | TRACKING METRIC(S) |
|---|---|---|---|
| 1.2.1 Program/Initiative: Convene a "CERP: Resilience and Mitigation Roundtable" of Town , Region of Durham, and Elexicon Energy staff representatives to:<br>• Determine the allocation of both Implementation Plan's actions into departmental work plans;<br>• Identify internal operational and capital funding opportunities for each sub-action;<br>• Determine the Town's role in each sub-action and identify internal leads;<br>• Build and leverage external partnerships; and<br>• Adaptively respond to changes in sub-actions, external funding opportunities, and technological developments. | Town staff time to coordinate and participate in meetings, plus implementation of actions | After Council adoption of CERP Phase 2: Mitigation Plan | Roundtable participants identified<br>Roundtable convened<br>Quarterly meetings hosted on an annual basis |

| SUB-ACTION | INTERNAL IMPACT | TIME FRAME | TRACKING METRIC(S) |
|---|---|---|---|
| 1.2.2 Program: With support of the Project Manager, Sustainability and Climate Change, dedicate two staff members from the Town's Strategic Initiatives department to oversee the implementation of CERP Phase 1: Resilience and CERP Phase 2: Mitigation, and develop annual work plans identifying activities, budgets and schedules to achieve the sub-actions.[3] | Town staff time to coordinate and oversee CERP: Phase 1 and Phase 2<br>One new full time equivalent (FTE) position (2026 onwards): $105,000 for annual salary and compensation package. | Existing staff member to be dedicated to CERP in 2024<br>New staff member to be hired in 2026<br>Ongoing | Annual work plan developed and reviewed<br>FTE spent on CERP: Phase 1 and Phase 2 tracked<br>One new FTE position hired in 2026 to manage CERP Phase 2: Mitigation |
| 1.2.3 Program: Track, update, and share annual progress and reporting on CERP Phase 2: Mitigation Plan's implementation. Activities can include tracking the annual progress on each of the Implementation Plan's tracking metrics and GHG inventories in the Annual Sustainability Report, investigating opportunities to update implementation actions, and submitting applications for third-party certification programs (i.e., Carbon Disclosure Project). | Town staff time to track, update, and share annual progress | 2024 - onwards | Implementation reported of actions reported in the Annual Sustainability Report |
| 1.2.4 Program: Complete an annual GHG inventory according to the GHG Protocol for Community-Scale GHG Inventories, the standard accounting protocol for GHG emissions, to enable the Town to track its progress against targets and support reporting to CDP and the annual indicator report. | Town staff time to track, update, and share annual progress<br>Consulting fees for annual GHG emissions inventory (if used): $10,000 - $20,000 per annual inventory | 2025 - onwards | Annual GHG inventory completed |

## ACTION 1.3 MONITOR AND APPLY FOR ADDITIONAL FUNDING.

The Mitigation Plan's financial analysis (Ancillary Report: Financial Analysis) estimates the total funding required across all sectors in the community to implement the actions and meet the modelled low-carbon scenario's 2045 target. The Implementation Plan includes estimates of the investment costs across all sectors for each action up to the year 2030. The investment costs are not solely borne by the Town; however, a key role of the Town will be to apply for funding and grant opportunities to fund either Town-led projects or to further fund community initiatives, such as incentive programs for community retrofits. Investigating all financial tools available to the Town will be critical, as capital costs or upfront investments are considered a primary barrier to climate action. These costs can be provided by a variety of sources, such as the funding opportunities identified in the Implementation Plan.

| SUB-ACTION | INTERNAL IMPACT | TIME FRAME | TRACKING METRIC(S) |
|---|---|---|---|
| 1.3.1 Program/Initiative: The Town's Climate Change Coordinator position will monitor and apply for funding and grant opportunities. | Town staff time to track and apply for funding | 2024 - onwards | Number of annual funding applications submitted |

[3] The Town's Strategic Initiatives department has an existing Climate Change Coordinator (one FTE) overseeing the implementation of CERP Phase 1: Resilience and CERP Phase 2: Mitigation. To meet this sub-action, the Town will need to hire an additional FTE position (Climate Change Coordinator) in 2026 to oversee the implementation of CERP Phase 2 and the existing Climate Change Coordinator would continue overseeing the implementation of CERP Phase 1.

# Section Two: Big Moves Implementation

This section provides the starting point for the CERP Phase 2: Mitigation Plan's low-carbon pathway. It is designed to generate momentum in each Big Move by identifying actions each sector must undertake to decrease emissions. The actions and sub-actions identified in this section align with "Whitby's Low-Carbon Actions" section in the Mitigation Plan. The Implementation Plan is designed to be a living document, as circumstances evolve (e.g., community champions are identified, funding becomes available, technologies change), the Implementation Plan should be updated to reflect new opportunities and advancements.

## Decarbonizing Buildings

Retrofitting and decarbonizing buildings offers a significant opportunity to reduce energy consumption and GHG emissions while also supporting the local economy through job creation. The most cost-effective strategy is to first maximize energy efficiency through building retrofits, and to then focus on fuel switching from natural gas to either electric air-source/ground-source heat pumps and water heaters or other renewable energy solutions. There are five actions related to retrofitting and fuel switching residential, institutional, commercial, and industrial (ICI), and municipal buildings:

- Action 2.1 Develop a deep retrofit program for all non-municipal buildings in Whitby, including residential, ICI buildings.
- Action 2.2 Implement the deep retrofits for municipal buildings as identified in the Zero Carbon Whitby Framework.
- Action 2.3 Develop a retrofit program for electric heat pumps and water heaters for residential and non-residential buildings.
- Action 2.4 Develop programs to support all new non-municipal buildings in Whitby in achieving net-zero standards, including residential, institutional, commercial, and industrial (ICI) buildings.
- Action 2.5 Construct all new municipal buildings to meet net-zero standards as identified in the Zero Carbon Whitby Framework.

### FUNDING OPPORTUNITIES

The following funding opportunities and sources have been identified to support the residential and ICI sectors:

- The Government of Canada provides programs for individual residents and businesses, such as the Greener Homes Grant, Deep Retrofit Accelerator Initiative, Implementation Readiness Fund, and Greener Neighbourhood Pilot Program.
- The Ontario Government provides programs for both residents and municipalities to fund retrofits. Save on Energy Program provides an Energy Affordability Program, Peak Perks Program, and Energy Action Plan to support residents in lowering energy use at peak times.
- The Federation of Canadian Municipalities (FCM) provides up to $175,000 Feasibility Study, to assess options for a local home-energy upgrade financing program, and up to $10 million for the Capital Program, a loan or credit enhancement for local home-energy upgrade financing program. In addition, FCM provides up to $500,000 Pilot Project funding for retrofitting or new construction of sustainable affordable housing.
- The FCM provides a Community Efficiency Financing Program to help municipalities develop energy financing programs. The Property Assessed Clean Energy (PACE) programming can be financed through the municipality, private investment or a third party such as a Community Revolving Loan Fund, a Local Improvement Charge (LIC), or the Durham Greener Homes Program.
- Canada Infrastructure Bank's Building Retrofits Initiative provides financing for energy retrofits projects.
- Private investments include investments from individual homeowners and business owners to complete building retrofits, and private sector financing into retrofit programs such as the PACE programs.

The following funding opportunities have been identified to support the municipal sector:

- The Town's Zero Carbon Revolving Reserve Fund was established to fund the incremental costs of completing the Zero Carbon Whitby Framework.
- The FCM Green Municipal Fund provides support for local governments and not-for-profit organizations in retrofitting public buildings to improve energy performance.
- The Government of Canada's Low Carbon Economy Fund provides between $1 million up to $25 million in funding for eligible project expenditures.

### INTERESTED AND AFFECTED PARTIES

The following interested and affected parties have been identified for the the residential and ICI sectors:

- Elexicon Energy
- Enbridge Gas
- Local developers (e.g., Building Industry and Land Development [BILD] Durham Region Chapter)

- Local construction companies (e.g., Residential Construction Council of Ontario [RESCON] can be a resource for beginning engagement with local construction companies)
- Post-secondary education institutions (e.g., Ontario Tech University, Durham College Geothermal Field and Energy Innovation Centre, Trent University)
- Ontario Landlords Association
- Local manufacturers and trades associations
- Canada Green Building Council
- Ontario Government
- Windfall Ecology Centre
- Canada-Ontario Housing Benefit (COHB)
- Housing Services Corporation
- Clean Air Partnership
- The Atmospheric Fund
- At-risk and affordable housing groups (e.g., Local Diversity and Immigration Partnership Council)

The following interested and affected parties have been identified for the municipal sector:

- Elexicon Energy
- Enbridge Gas

## ACTION 2.1 DEVELOP A DEEP RETROFIT PROGRAM FOR ALL NON-MUNICIPAL BUILDINGS IN WHITBY, INCLUDING RESIDENTIAL, INSTITUTIONAL, COMMERCIAL, AND INDUSTRIAL (ICI) BUILDINGS.

| ACTION 2.1 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, residential and ICI buildings are retrofitted to achieve a 50% reduction in thermal energy and a 30% reduction in electrical savings. Forty percent of existing buildings are retrofitted by 2030, 85% by 2040, and 100% by 2045. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 40% of all residential buildings are retrofitted to achieve a 50% reduction in thermal energy and a 30% reduction in electrical savings. |
| **GHG IMPACT:** | High |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | Residential buildings: $655 million<br>ICI buildings: $178 million |

| **DETAILED SUB-ACTIONS** | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| Residential Buildings | | | | |
| 2.1.1 Program/Initiative: Complete a study in collaboration with Elexicon Energy that forecasts adoption rates for decarbonizing buildings actions and identifies the impact of these programs on distribution network infrastructure (including grid capacity limitations for renewable energy installation) in order to plan for future loads to ensure sufficient capacity. | Town staff time to collaborate with Elexicon Energy<br>Consulting firms fees to complete study (if used): approx. $60,000 - $100,000 | Project Leads and Sponsors: Town of Whitby and Elexicon Energy | Project Initiation: Q1, 2025[4]<br>Project Completion: Q4, 2025 | Partnership with Elexicon Energy established<br>Study completed<br>Establish next steps required to increase adoption rates and grid capacity |
| 2.1.2 Initiative: Investigate the development of a residential Property Assessed Clean Energy (PACE) program. Similar programs have been implemented across Canada, including the City of Edmonton's Residential Clean Energy Improvement Program (CEIP), Toronto's Home Energy Loan Program (HELP) program, and Nova Scotia PACE, which can be used as a guide and precedent for the creation of a Whitby PACE program. Allow building owners to stack PACE loans with the Durham Greener Homes Program.<br>Note: Integrate with Action 2.1.3 | Town staff time to complete PACE assessment<br>Consulting firm fees to develop a PACE feasibility study (if used): approx. $130,000[5] | Project Leads: Town of Whitby and Region of Durham | Initiation and Planning: Q1, 2024 - Q4, 2024<br>Implementation: Q1, 2025 | PACE program investigated<br>PACE program presented to Council for approval<br>PACE program investment secured[6] |
| 2.1.3 Program/Initiative: Investigate additional financing opportunities for residents to make retrofits and potentially stack with the Durham Greener Homes Program.<br>Note: Integrate with Action 2.1.2 | Town staff time to complete financing research | Project Lead: Town of Whitby<br>Project Support: Region of Durham | Initiation and Planning: Q1, 2024 - Q4, 2024<br>Program Implementation: Q1, 2025 | Research completed<br>Durham Greener Homes Program expanded to include further funding as appropriate |
| 2.1.4 Initiative/Education: Develop a guide about qualified contractors with external links to additional tips and information to complete residential retrofits. | Town staff time to assist in the development of the guide<br>Internal digital communications fees: $12,000 (per campaign) | Project Lead: Region of Durham<br>Project Support: Town of Whitby | Initiation: Q1, 2025<br>Project Completion: Q1, 2025 | Guide developed and posted on the Town of Whitby website |
| 2.1.5 Education: Educate residents on energy retrofits that can be completed in their homes, and the benefits of energy retrofits and heat pumps. For example, education materials/initiatives could include a video series of community members successfully undertaking home retrofits. | Town staff time to assist in the development of a communications plan<br>Internal communications fees: $12,000 (per campaign) | Project Lead: Region of Durham<br>Project Support: Town of Whitby | Initiation and Planning: Q4, 2024<br>Ongoing | Number of education techniques used<br>Number of people reached through education efforts |
| 2.1.6 Education: Clearly communicate and promote existing programs and incentive stacking opportunities that residents can take advantage of to complete energy retrofits through federal, provincial, regional, utility, and other local government programs. | Town staff time to develop communications plan<br>Internal communications fees: $12,000campaign) | Project Lead: Town of Whitby | Initiation: Q4, 2024<br>Ongoing | Number of education techniques implemented<br>Number of people reached through education efforts |

[4] While the project will not be initiated until 2025, during 2024 the Town should begin developing the partnership with Elexicon Energy and a RFP for consulting services.

[5] As both the Town and Region of Durham are leading this initiative the consulting fees may be split between the Town and Durham of Region. The FCM grant provides up to $175,000 in eligible costs for municipalities to assess options for a local home-energy upgrade financing program.

[6] Funding the PACE and commercial PACE (C-PACE) program can be done using federal funding via the FCM, the Town of Whitby's budget, and private capital. For example, the City of Ottawa uses a combination of FCM funding and a loan from the Vancity Community Investment Bank. Seeking private sector financing can fill the gap required to retrofit existing buildings through the PACE program. Municipal green bonds can be used to support private sector investments in PACE programs, thereby helping to lower interest rates for homeowners.

| **DETAILED SUB-ACTIONS** | | | | |
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| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 2.1.7 Initiative/Education: Support the Region of Durham in developing partnerships with affordable housing agencies and seek out funding to conduct a bulk energy retrofit pilot to retrofit several housing units at one time with minimal disruption to residents. | Town staff time to assist in the development of partnerships and establish funding | Project Lead: Region of Durham<br>Project support: Town of Whitby | Initiation: Q4, 2024<br>Ongoing | Partners identified and established<br>Funding for pilot secured[7]<br>Number of low-income housing retrofitted |
| 2.1.8 Advocacy: Support sector advocacy to the provincial and federal governments, construction industry, and local post-secondary education institutions, including trades schools, to develop a labour and training strategy to meet building retrofit targets. | Town staff time to engage with Clean Air Partnership (CAP) and The Atmospheric Fund (TAF) | Project Lead and Sponsor: CAP and/or TAF<br>Project Support: Town of Whitby | Initiation: 2026 | Advocacy completed<br>Local labour and training strategy developed |
| ICI Buildings | | | | |
| 2.1.9 Initiative: Investigate the development of a commercial Property Assessed Clean Energy (C-PACE) program. Similar programs have been implemented across Canada, including the City of Edmonton's Commercial Clean Energy Improvement Program (CEIP). | Town staff time to complete C-PACE assessment<br>Potential feasibility study fees are included in Action 2.1.2 | Project Leads: Town of Whitby and Region of Durham | Initiation and Planning: Q1, 2024 - Q4, 2024<br>Implementation: Q1, 2025 | C-PACE program investigated<br>C-PACE program presented to Council for approval<br>C-PACE program investment secured |
| 2.1.10 Initiative: Support the Region of Durham in investigating the opportunity to expand the Durham Greener Buildings Program to include additional financing support for businesses beyond the three-year timeline. | Town staff time to collaborate with Region of Durham<br>(Note: the Regional cost of the program is $450,000 over three years [2023-2026]) | Project Lead and Sponsor: Region of Durham<br>Project Support: Town of Whitby | Program Initiation: Q1, 2025 | Durham Greener Buildings Program expanded to include further funding<br>Durham Greener Buildings Program expanded beyond three-year time frame |
| 2.1.11 Initiative/Education: Develop a guide about qualified contractors with external links with additional tips and information to complete ICI retrofits.<br>Note: Action can be completed at the same time as Action 2.1.4. | Town staff time to assist in the development of the guide<br>Internal digital communications fees: $12,000 (per campaign) | Project Lead: Region of Durham<br>Project Support: Town of Whitby | Initiation: Q1, 2025<br>Project Completion: Q1, 2025 | Guide developed and posted on the Town of Whitby website |
| 2.1.12 Education: Educate the ICI sector on the energy retrofits that can be completed, the benefits of energy retrofits and heat pumps. For example, education materials/initiatives could include a video series of businesses successfully undertaking retrofits.<br>Note: Action can be completed at the same time as 2.1.5 | Town staff time to assist in the development of a communications plan<br>Internal communications fees: $12,000 (per campaign) | Project Lead: Region of Durham<br>Project Support: Town of Whitby | Initiation and Planning: Q4, 2024<br>Ongoing | Number of education techniques used<br>Number of people reached through education efforts |

[7] The FCM provides up to $500,000 in Pilot Project funding to retrofit or new construction of sustainable affordable housing.

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 2.1.13 Initiative: Develop a program to recognize ICI sector business leaders, such as publishing feature articles and blurbs in the Town of Whitby's Economic Development Newsletter and/or website. | Town staff time to develop program<br>Internal communications fees to promote program: $12,000 (annually) | Project Lead: Town of Whitby | Initiation by 2027 | Recognition program developed<br>Number of ICI sector businesses highlighted in the program |

## ACTION 2.2 IMPLEMENT THE DEEP RETROFITS FOR MUNICIPAL BUILDINGS AS IDENTIFIED IN THE ZERO CARBON WHITBY FRAMEWORK.

| ACTION 2.2 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, municipal buildings are retrofitted to achieve the long-term goal of eliminating GHG emissions associated with operations of buildings for all Town-owned facilities. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 40 of the Town's buildings are retrofitted based on the schedule identified in the Zero Carbon Whitby: Costing Study to Eliminate Greenhouse Gas Emissions 2022-2045. |
| **GHG IMPACT:** | Medium |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | $45.4 million<br>Note: This budget was presented to Council as part of the Zero Carbon Whitby Frameworking and Costing Study; this is not an additional cost as a result of the Mitigation Plan. |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 2.2.1 Program: Complete building retrofits and energy system replacements of the 46 existing buildings as identified in the Zero Carbon Whitby: Costing Study to Eliminate Greenhouse Gas Emissions 2022-2045 (Zero Carbon Whitby Costing Study). | Investment: $45.4 million<br>(Note: This budget was presented to Council as part of the Zero Carbon Whitby Frameworking and Costing Study; this is not an additional cost as a result of the Mitigation Plan) | Project Lead: Town of Whitby | As per Zero Carbon Whitby Costing Study schedule | Number of annual retrofits completed based on Zero Carbon Whitby schedule<br>Annual carbon budget target met<br>Annual Reporting on Zero Carbon Whitby completed |
| 2.2.2 Initiative/Education: Develop an interactive public dashboard, connected to sub-metering systems installed as per the recommendations of the Zero Carbon Whitby Framework, that displays energy consumed and carbon emissions saved in the building. | $30,000 in communications services for the development for public dashboard | Project Lead: Town of Whitby | Initiation: 2026[8] | Public dashboard created |

[8] Note: the estimated initiation date is dependent on installation timelines of the sub-metering program in the Zero Carbon Whitby Framework.

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 2.2.3 Education: Develop a communications and engagement plan to publicly report on Town energy retrofits, host public demonstrations, and share information on the results and payback. For example, sharing bi-annual infographics with the community to demonstrate the Town's progress on implementing the Zero Carbon Whitby Framework. | Town staff time to develop communications and engagement plan<br>Internal communications fees: $12,000 (annually) | Project Lead: Town of Whitby | Initiation: Q4, 2024<br>Ongoing | Communications and engagement plan developed<br>Number of annual community touchpoints<br>Number of community members reached (e.g., website visits, social media campaign reach) |

## ACTION 2.3 DEVELOP A RETROFIT PROGRAM FOR ELECTRIC HEAT PUMPS AND WATER HEATERS FOR RESIDENTIAL AND NON-RESIDENTIAL BUILDINGS.

| ACTION 2.2 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, 100% of heat load in existing residential, institutional, commercial, and industrial (ICI) buildings are served by heat pumps, and 100% of water heaters are served using electric sources. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 40% of residential and ICI building heat load is served using heat pumps, and 20% of water heaters are electric. |
| **GHG IMPACT:** | High |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | $198 million |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 2.3.1 Program: Identify eligible households and implement a targeted program for installing heat pumps and electric water heaters in lower-income or at-risk households (e.g., senior centers, support housing), alongside measures that increase efficiency. For example, explore a program to connect heat pump manufacturers and installers with lower-income households to discount the incentive of the heat pump at the time of purchase.[9]<br>Note: This Action overlaps with CERP Phase 1: Resilience - Implementation Plan Action 2.2. | Town staff time to develop program | Project Lead: Town of Whitby<br>Project Support: Region of Durham | Initiation and Planning: Q4, 2024 - Q2 2025<br>Implementation: Q3, 2025 | List of eligible households identified<br>Partnerships established (i.e., manufacturers, installers, or private funders) to fund program<br>The annual number of heat pumps and electric water heaters installed at lower income or at-risk houses |

[9] Programs supporting eligible homes that meet income qualification requirements provide rebate coverage based on the number of people living in the home and the income level, for example the CleanBC program provides up to 95% of the upgrade costs. The approximate installation cost for a residential heat pump ranges from $15,000 to $32,000, if following a similar rebate coverage based on number of people living in the home and income level the program should anticipate to cover up to 95% of the eligible installation costs.

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 2.3.2 Initiative: Support the Region of Durham in investigating opportunities to expand the Durham Greener Homes and Durham Greener Buildings Programs incentives and funding for heat pump and electric water heater retrofits. | Town staff time to investigate opportunities | Project Lead and Sponsor: Region of Durham<br>Project Support: Town of Whitby | Initiation and Planning: Q4, 2024 - Q2 2025<br>Implementation: Q3, 2025 | Durham Greener Homes and Buildings Program expanded to include further funding for heat pumps and electric water heaters |
| 2.3.3 Advocacy: Support sector advocacy to the provincial and federal governments to adopt legislation banning the installation of natural gas appliances. | Town staff time to support Clean Air Partnership (CAP) and The Atmospheric Fund (TAF) | Project Lead and Sponsors: CAP and/or TAF<br>Project Support: Town of Whitby | Initiation: 2025[10] | Advocacy opportunity discussed with CAP and TAF<br>Advocacy campaign launched |
| 2.3.4 Education: Develop and implement a communications and engagement plan to educate the community about the benefits and feasibility of electric heat pumps and water heaters, and federal, provincial, and regional rebates and grant programs. For example, engagement events and campaigns can include open houses hosted at locations with electric heat pumps and water heaters, speaker-series and educational webinars, and social media campaigns. | Town staff time to develop communications and education program<br>Internal communications fees: $12,000 (per campaign) | Project Lead; Town of Whitby | Initiation: 2026<br>Ongoing | Communication and engagement plan developed and implemented<br>Number of campaigns developed and number of engagement events hosted<br>Number of community members reached (e.g., website visits, social media campaign reach) |

## ACTION 2.4 DEVELOP PROGRAMS TO SUPPORT ALL NEW NON-MUNICIPAL BUILDINGS IN WHITBY IN ACHIEVING NET-ZERO STANDARDS, INCLUDING RESIDENTIAL, INSTITUTIONAL, COMMERCIAL, AND INDUSTRIAL (ICI) BUILDINGS.

| ACTION OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, residential and ICI buildings are built to achieve net-zero standards in accordance with the Canadian Home Builders Association Net Zero Home Labelling Program, PassiveHouse Canada, and/or Zero Carbon Building Standards. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, all new residential and ICI buildings are built to Net-Zero Ready standards. |
| **GHG IMPACT:** | Medium |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | $120 million |

[10] While the project initiation is dependent on CAP and TAF, during 2024 the Town should begin developing the partnerships with CAP and TAF to encourage integration of Action 2.3.3 into the organization's 2025 work plan and priorities.

| **DETAILED SUB-ACTIONS** | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 2.4.1 Program: In collaboration with the Region of Durham, City of Pickering, Municipality of Clarington and Town of Ajax, investigate and implement an incentive program to encourage the adoption of the Whitby Green Standard (WGS) higher energy performance standards. | Town staff time to develop program | Project Lead: Region of Durham<br>Project Support: Town of Whitby, City of Pickering, Municipality of Clarington and Town of Ajax<br>Project Sponsor: The Atmospheric Fund | Initiation: Q4, 2023<br>Implementation: Q1, 2024 | Incentives study completed<br>Incentive program funded and implemented for energy performance standards<br>The number of development applications approved using the higher tier energy performances in the WGS |
| 2.4.2 Initiative: By end of 2024, update the Whitby Green Standard's (WGS) minimum requirements to Tier 2 and develop a Terms of Reference (TOR) outlining specific requirements for each performance criteria. | Town staff time to update WGS' TOR<br>Consulting fees: $80,000 (Note: This budget was presented and approved by Council; this is not an additional cost as a result of the Mitigation Plan) | Project Lead: Town of Whitby<br>Project Support: CAP, TAF, Region of Durham, City of Pickering, and Town of Ajax | Initiation: Q1, 2024<br>Implementation: Q4, 2024 | TOR developed<br>WGS Tier 2 requirements implemented |
| 2.4.3 Education: Educate developers, planners, and builders on the WGS and opportunities to achieve higher performance standards. | Town staff time to develop education campaigns<br>Internal communications fees: $12,000 (per campaign) | Project Lead: Town of Whitby | Initiation: Q1, 2025 | Education materials developed<br>Number of developers, planners, and builders engaged |
| 2.4.4 Advocacy: Identify organizations to advocate the Ontario Government to adopt higher energy performance codes in the Ontario Building Code. | Town staff time to identify organizations | Project Lead: Town of Whitby<br>Project Sponsors and Supports: To be confirmed (TBC) based on identification of organizations | Initiation: 2025 | Participation in Ontario Government Engagement Sessions, and comments on proposed changes provided<br>Identification and engagement with advocacy organizations |
| 2.4.5 Advocacy: Identify organizations to advocate for training and micro-credential programs for skilled tradespeople to increase their knowledge and skills around efficient building practices. | Town staff time to identify organizations | Project Lead: Town of Whitby<br>Project Sponsors and Supports: TBC based on identification of organizations | Initiation: 2025 | At least one project sponsor, support, or partnership identified<br>Increase number of training and micro-credential programs available regarding efficient building practices |

## ACTION 2.5 CONSTRUCT ALL NEW MUNICIPAL BUILDINGS TO MEET NET-ZERO STANDARDS AS IDENTIFIED IN THE ZERO CARBON WHITBY FRAMEWORK.

| ACTION 2.5 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, all new municipal buildings will achieve at least Tier 3 of the Whitby Green Standard (i.e., Net-Zero Standard). |
| **2031 MODELLED LOW CARBON TARGET:** | By 2031, two new buildings and one renovation are constructed to meet net-zero standards as identified in the Zero Carbon Whitby Framework.<br>Note: 2031 aligns with the Zero Carbon Whitby Framework and Costing Study timeline. |
| **GHG IMPACT:** | Low |
| **TOTAL MODELLED INVESTMENT (2023 - 2045):** | Present to 2025: $9.98 million<br>Present to 2045: $23.88 million<br>Note: This budget was presented to Council as part of the Zero Carbon Whitby Framework and Costing Study; this is not an additional cost as a result of the Mitigation Plan. The investment has been reported to 2025 and 2045 to align with the Zero Carbon Whitby Costing Study timeline. |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 2.5.1 Infrastructure: Complete construction of three new facilities (the Whitby Sports Complex,the Fire Station Training Tower/ Fire Training Complex, and new Animal Services Building). Complete the Operations Centre Phase 2 Expansion to a net-zero standard as identified in the Zero Carbon Whitby: Costing Study to Eliminate Greenhouse Gas Emissions 2022-2045. | Present to 2025: $9.98 million<br>Present to 2045: $23.88 million<br>(Note: This budget was presented to Council as part of the Zero Carbon Whitby Framework and Costing Study; this is not an additional cost as a result of the Mitigation Plan) | Project Lead: Town of Whitby | As per Zero Carbon Whitby Costing Study schedule | New buildings built to Tier 3 of the Net Zero Standard |
| 2.5.2 Initiative/Education: Conduct public consultation to report on the Town's new net-zero construction, host public demonstrations, and share information on the results. | Town staff time to develop consultation report<br>Internal communications fees: $12,000 (per campaign) | Project Lead: Town of Whitby | Initiation: 2026<br>Ongoing | Number of communication actions completed<br>Number of community members reached (e.g., website visits, social media campaign reach) |

## Generating Renewable Energy

Generating local renewable energy creates many economic development opportunities, including revenue generation and jobs, and can support many of the low-carbon actions in this strategy, including space heating and electrifying vehicles. Generating renewable energy will be achieved through the following overarching action:

- Action 3.1 Increase local installation of rooftop solar photovoltaics (PVs) and ground-mount solar PVs, and investigate new technology.

## FUNDING OPPORTUNITIES

The following funding opportunities and sources have been identified to support renewable energy uptake within the residential and ICI sectors:

- The Government of Canada provides programs for individual residents and businesses, such as the Greener Homes Grant, Canada Greener Homes Loan, Low Carbon Economy Fund (open to non-profit organizations, public sector, and Indigenous recipients), Canadian Renewable and Conservation Expenses (open to businesses), and Investment Tax Credit (beginning in 2023 this refundable incentive will cover up to 30% of the capital cost investment).
- The Enbridge Home Efficiency Rebate Program further supports the Canada Greener Homes Grant by providing up to $5,000 for solar panels or batteries.
- The Ontario Government provides programs for both residents and municipalities to fund renewable energy projects, such as the net-metering program.
- The FCM provides up to $175,000 Feasibility Study, to assess energy recovery or district energy.
- The FCM provides a Community Efficiency Financing Program to help municipalities develop energy financing programs. The Property Assessed Clean Energy (PACE) programming can be financed through the municipality, private investment or a third party such as a Community Revolving Loan Fund, a Local Improvement Charge (LIC), or the Durham Greener Homes Program.
- Canada Infrastructure Bank's Clean Power Initiative provides financing for renewables, district energy systems, energy storage, etc., projects.
- Private investments include investments from individual homeowners and business owners to complete solar installations, and private sector financing could be explored for PACE programs.

## INTERESTED AND AFFECTED PARTIES

The following interested and affected parties have been identified for generating renewable energy:

- Elexicon Energy
- Enbridge Gas
- Local developers (e.g., Building Industry and Land Development [BILD] Durham Region Chapter)
- Local construction companies (e.g., Residential Construction Council of Ontario [RESCON] can be a resource for beginning engagement with local construction companies)
- Post-secondary education institutions (e.g., Ontario Tech University, Durham College Geothermal Field and Energy Innovation Centre, Trent University)
- Ontario Landlords Association
- Local manufacturers and trades association
- Canada Green Building Council
- Ontario Government
- Windfall Ecology Centre
- Canada-Ontario Housing Benefit (COHB)
- Housing Services Corporation
- Clean Air Partnership
- The Atmospheric Fund
- At-risk and affordable housing groups (e.g., Local Diversity and Immigration Partnership Council)

## ACTION 3.1 INCREASE LOCAL RENEWABLE ENERGY GENERATION THROUGH INSTALLATION OF ROOFTOP SOLAR PHOTOVOLTAICS (PVS) AND GROUND-MOUNT SOLAR PVS, AND INVESTIGATING NEW TECHNOLOGY.

| ACTION 3.1 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, 481 MW of solar capacity is installed on residential, institutional, commercial and industrial (ICI), and municipal buildings' available rooftops (maximum capacity achieved) and 160 MW of ground mount PV capacity is installed on existing parking lots. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, residential rooftop solar capacity added is 98.79 MW, non-residential solar capacity added is 54.26 MW, and parking lot solar generation capacity added is 84 MW. |
| **GHG IMPACT:** | High |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | $388 million |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 3.1.1 Policy: Complete a review and assessment of zoning by-laws to screen for any barriers to solar photovoltaic (PV) installations, and update by-laws accordingly. | One time consulting fees to complete assessment of by-laws: $30,000 | Project Lead: Town of Whitby<br>Project Support: The Atmospheric Fund | Initiation: Q1, 2025<br>Completion: Q3, 2025 | By-law assessment complete<br>Assessment and recommended updates reported to Council<br>By-laws revised to as per recommendations |
| 3.1.2 Program/Initiative: Create an inventory of all programs, funding, and support mechanisms available to building owners in Whitby to add solar PVs to rooftop and parking lots and analyze opportunities and gaps. | Town staff time to assist in the creation of an inventory | Project Lead: Region of Durham<br>Project Support: Town of Whitby | Initiation: Q3, 2024<br>Completion: Q1, 2025 | Inventory of opportunities and gaps completed<br>Inventory is used to support the implementation of Actions 3.1.3 and 3.1.5 |
| 3.1.3 Education: Educate building owners on programs, funding, and support mechanisms available to install solar PVs, and of the feasibility of these installations in Whitby. | Town staff time to assist in the development of an education campaign<br>Internal communications fees: $12,000 (per campaign) | Project Lead: Region of Durham<br>Project Support: Town of Whitby | Initiation: Q1, 2025<br>Ongoing | Number of education programs completed on an annual basis<br>Number of building owners engaged with on an annual basis |
| 3.1.4 Infrastructure: Complete solar PV installations on municipal buildings as identified in the Zero Carbon Whitby: Costing Study to Eliminate Greenhouse Gas Emissions 2020-2045. | $1.5 million for infrastructure upgrades<br>(Note: This budget was presented to Council as part of the Zero Carbon Whitby Framework and Costing Study; these are not additional costs as a result of the Mitigation Plan) | Project Lead: Town of Whitby | As per Zero Carbon Whitby Costing Study schedule | Annual installations completed as per the Zero Carbon Whitby Costing Study schedule |

| **DETAILED SUB-ACTIONS** | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 3.1.5 Program: Investigate funding and financing tools (i.e., PACE or PACE-like programs) to add rooftop solar PVs to residential and ICI buildings. Determine the Town's role and identify required partners. | Town staff time to develop research<br>Potential feasibility study fees are identified in Action 2.1.2[11] | Project Leads: Town of Whitby and Region of Durham | Initiation and Planning: Q1, 2024 - Q4, 2024<br>Implementation: Q1, 2025 | Financing and funding tools investigated<br>Tools presented to Council and Town's role identified<br>Funding partners and sponsors identified |
| 3.1.6 Program: Develop plan for ground mount solar installations on existing municipal parking lots, and investigate opportunities for commercial-scale solar PV systems on other underutilized parcels of land such as school rooftops, Whitby facilities/buildings, parking garages, fire stations, and libraries. | Town staff time to develop plan<br>Consulting firm fees to develop costing study and plan (if used): approx. $75,000 - $150,000 | Project lead: Town of Whitby | Initiation and Planning: Q1, 2025<br>Implementation: 2026 | Plan completed and presented to Council<br>First ground mount solar installation completed |
| 3.1.7 Policy/Initiative: Complete a study to determine the areas throughout the Town that are best suitable for a district energy, and wastewater heat recovery. Based on study, install one geothermal pilot project by 2026. | Town staff time to coordinate the completion of the study<br>Consulting firm fees to develop feasibility study: $60,000[12] | Project Leads: Town of Whitby and Region of Durham | Initiation and Planning: Q2, 2024<br>Implementation: 2026 | Study completed<br>One geothermal project completed by 2026 |

## Enhancing Low-Carbon Transportation

Enhancing low-carbon transportation includes strategies to electrifying transportation, including public transit, municipal fleets, personal vehicles, and commercial vehicles, and increasing the use of transit and active transportation. These actions will be critical to reducing emissions from transportation and will provide more co-benefits for health and community well-being. There are seven action categories to promote low-carbon transportation:

- Action 4.1 Electrify the regional transit fleet.
- Action 4.2 Electrify the Town municipal fleet as identified in the Zero Carbon Whitby Framework.
- Action 4.3 Electrify personal use vehicles.
- Action 4.4 Electrify commercial vehicles.
- Action 4.5 Advocate for transit expansion.
- Action 4.6 Increase active transportation.
- Action 4.7 Decrease vehicle-kilometers travelled.

[11] The FCM grant provides up to $175,000 in eligible costs for municipalities to assess options for a local home-energy upgrade financing program.

[12] The FCM provides up to $175,000 for municipalities to assess energy recovery or district energy.

## FUNDING OPPORTUNITIES

The following funding opportunities and sources have been identified to support transit electrification and expansion:

- The Government of Canada Infrastructure Canada's Zero Emission Transit Fund provides funding support for transit electrification, and support infrastructure construction.
- The Green Municipal Fund provides funding support for studies, capital projects, and pilot projects related to transit electrification and expansion.

The following funding opportunities and sources have been identified to support active transportation expansion:

- The Government of Canada's Active Transportation Fund provides support for active transportation capital and planning projects.
- The Green Municipal Fund provides funding support for studies, capital projects, and pilot projects related to transportation networks and commuting.

The following funding opportunities have been identified to support vehicle electrification for municipal fleets, personal use vehicles, and commercial vehicles:

- FCM GMF provides up to $500,000 in Pilot Project funding to reduce fossil fuel use in municipal fleets.
- The Government of Canada provides several programs to support EV purchases and infrastructure, such as the Zero Emission Vehicle Infrastructure Program, and Incentives for Zero Emission Vehicles Program.
- Natural Resources Canada provided Elexicon Group with distribution rights to provide funding for residents and businesses to install EV charging stations.
- The Atmospheric Fund's EV Station Fund provides organizations with rebates of up to 50% of EV charging station installation cost.

## INTERESTED AND AFFECTED PARTIES

The following interested and affected parties have been identified to support transit electrification and expansion:

- Durham Region
- Ontario Traffic Council
- Local businesses
- Landlords
- Community members

The following interested and affected parties have been identified to support active transportation expansion:

- Durham Region
- Ontario Traffic Council
- Local businesses
- Landlords
- Community members (e.g. Active Transportation Advisory Committee)

The following interested and affected parties have been identified to support vehicle electrification for municipal fleets, personal use vehicles, and commercial vehicles:

- Community members
- Local businesses and institutions
- Local dealerships
- Ontario Trucking Association
- Ontario Government
- Durham Region

- Post-secondary institutions
- Electric Vehicle Society
- Plug'n Drive
- Electric Mobility Canada
- Non-profit organizations
- The Atmospheric Fund
- Clean Air Partnership
- Electric Vehicle Society

## ACTION 4.1 ELECTRIFY THE REGIONAL TRANSIT FLEET.

| ACTION 4.1 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | Electrify bus fleet to achieve 30% electrification by 2024, 66% by 2030, and 100% by 2040. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 66% of the regional transit system is electrified. |
| **GHG IMPACT:** | Medium |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | $139 million |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 4.1.1 Advocacy: Host quarterly meetings with all transit operators (i.e. Durham Region Transit, Metrolinx, and school boards and local school bus companies) within Whitby to discuss the implementation of modelled action target for transit electrification by 2040, and understand each operator's progress in meeting this goal. | Town staff time to complete advocacy | Project Leads and Sponsors: Durham Region Transit, and Metrolinx<br>Project Support: Town of Whitby | Initiation 2025<br>Ongoing, quarterly meetings | Quarterly meetings with transit operators<br>Number of transit vehicles electrified monitored to ensure the target will be met |

## ACTION 4.2 ELECTRIFY TOWN OF WHITBY MUNICIPAL FLEET.

| ACTION 4.2 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, all municipal fleet vehicles are electric and charging infrastructure supports a five-vehicle-to-one-charging-station ratio as identified in the Zero Carbon Whitby Framework. |
| **2031 MODELLED LOW CARBON TARGET:** | By 2031, 61 electric vehicles are purchased and 12 chargers are installed to support fleet charging.<br>Note: 2031 aligns with the Zero Carbon Whitby Framework and Costing Study timeline. |
| **GHG IMPACT:** | Low |
| **TOTAL MODELLED INVESTMENT (2023 - 2031):** | $13 million<br>Note: This budget was presented to Council as part of the Zero Carbon Whitby Framework and Costing Study; these are not additional costs as a result of the Mitigation Plan. |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 4.2.1 Program: Continue to purchase fleet electric vehicles and charging stations as per the schedule identified in the Zero Carbon Whitby: Costing Study to Eliminate Greenhouse Gas Emissions 2022-2045. This includes the purchase of 61 electric vehicles and 12 chargers to achieve a one-to-every-five-electric-vehicle ratio. Following 2025, begin transitioning remaining fleet and equipment as per the Framework's schedule. | $13 million<br>(Note: This budget was presented to Council as part of the Zero Carbon Whitby Frameworking and Costing Study; these are not additional costs as a result of the Mitigation Plan) | Project Lead: Town of Whitby | As per Zero Carbon Whitby Costing Study time frame | Number of electric vehicles purchased annually<br>Number of electric vehicle chargers added for fleet use |

## ACTION 4.3 ELECTRIFY PERSONAL USE VEHICLES.

| ACTION 4.3 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | Beginning in 2026, 25% of all new light-duty vehicle purchases are electric. Beginning in 2030, 75% of all new light-duty vehicle purchases are electric. By 2050 (to align with federal targets), 100% of all new light-duty vehicle purchases are electric. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 75% of all new light-duty vehicle purchases are electric as per federal targets. |
| **GHG IMPACT:** | High |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | Not modelled |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 4.3.1 Program: Organize an annual test drive event in partnership with Plug'n Drive. | Town staff time to develop Plug'n Drive event | Project Lead: Town of Whitby<br>Project Sponsor and Support: Plug'n Drive | Initiation by Q4, 2024<br>Host annually | Annual test drive event |
| 4.3.2 Program/Initiative: Create an inventory of all programs, funding, and support mechanisms available for in-home electric vehicle infrastructure installations and purchases.[13] | Town staff time to develop inventory | Project Lead: Town of Whitby<br>Project Support: Clean Air Partnership | Initiation: Q2, 2025<br>Completion: Q3, 2025 | Inventory complete |
| 4.3.3 Education: Educate community members about the feasibility of purchasing electric vehicles in Whitby. | Town staff time to develop education plan<br>Internal communications fees: $12,000 (per campaign) | Project Lead: Town of Whitby | Initiation: Q3, 2025<br>Ongoing | Number of community members reached (e.g., website visits, social media campaign reach) |

[13] The Town of Whitby will be completing a Community EV Readiness Strategy. Action 4.3.2 could potentially be incorporated into the Community EV Readiness Strategy.

## ACTION 4.4 ELECTRIFY COMMERCIAL VEHICLES.

| ACTION 4.4 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, all new commercial light-duty vehicle purchases are electric. By 2045, all heavy- and medium-duty vehicles are a combination of hydrogen fuel and electric vehicles. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 25% of heavy- and medium-duty vehicles are electric and 25% are hydrogen-fuel. |
| **GHG IMPACT:** | Medium |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | $56 million |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 4.4.1 Policy: Support the development of refueling stations for zero emissions medium- and heavy-duty vehicles through investigating and developing zoning ordinances. | Town staff time to investigate and develop zoning ordinances | Project Lead: Town of Whitby | Initiation: 2026<br>Implementation: 2027 | Zoning ordinance implemented |
| 4.4.2 Initiative: Identify partners to collaborate on annual research on industry trends for the deployment of green hydrogen and electric vehicle infrastructure in the ICI sector. | Town staff time to complete annual research | Project Lead: Town of Whitby<br>Project Sponsor and Support: TBC based on partner identification | Initiation: 2026<br>Ongoing annually | ICI partners identified<br>Annual research on industry trends completed |
| 4.4.3 Education: Educate commercial vehicle owners annually on industry trends for the deployment of green hydrogen and electric vehicle infrastructure. | Town staff time to develop education plan<br>Internal communications fees: $12,000 (per campaign) | Project Lead: Town of Whitby | Initiation: 2026 | Annual communication reach to ICI sector on industry trends update |

## ACTION 4.5 ADVOCATE FOR TRANSIT EXPANSION.

| ACTION 4.5 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, 15% of all trips taken within Whitby are made using transit. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 10% of all trips taken within Whitby are made using transit. |
| **GHG IMPACT:** | Enabler |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | $170 million |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 4.5.1 Advocacy: Advocate Durham Region to undertake a study to increase the frequency of transit services across the Region. | Town staff time to support Region of Durham | Project Lead: Region of Durham<br>Project support: Town of Whitby | Initiation and Planning: Q1, 2024 - Q4 2025 | Study completed<br>Recommendations from the study are implemented<br>Increase frequency of transit services |
| 4.5.2 Education/Advocacy: Use education, advocacy, and promotional support to increase the number of employers that offer commute option programs and subsidized transit passes for their employees. | Town staff time to develop education campaign<br>Internal communications fees: $12,000 (one off) | Project Lead: Town of Whitby | Initiation by Q4, 2025 | Number of community members reached (e.g., website visits, social media campaign reach) |

## ACTION 4.6 INCREASE ACTIVE TRANSPORTATION.

| ACTION 4.6 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, 15% of all trips taken within Whitby are made using active transportation. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 14% of 2-10km trips are completed using walking or biking. |
| **GHG IMPACT:** | Enabler |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | $2.2 million |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 4.6.1 Infrastructure: Implement the infrastructure outlined in the Town's Active Transportation Plan. | $2.2 million (infrastructure upgrades)<br>(Note: This budget was presented to Council; this is not additional costs as a result of the Mitigation Plan) | Project Lead: Town of Whitby<br>Project Support: Region of Durham | As per the timing of upgrades identified in Active Transportation Plan | Number of projects completed |
| 4.6.2 Program: Seek partnership with Clean Air Partnership (CAP) and the Centre for Active Transportation to develop an electric-bike (E-Bike) lending library pilot program. | Town staff time to support E-Bike library program | Project Leads: Town of Whitby and Whitby Public Library<br>Project Sponsors: Centre for Active Transportation<br>Project Support: CAP and Region of Durham | Initiation and Planning: Q1, 2025 - Q2, 2026<br>Implementation: Q3, 2026 | Develop partnership (i.e., with CAP)<br>Budget approved by Council<br>Pilot E-Bike library initiated |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 4.6.3 Education: Promote active transportation and educate residents on the benefits. Promote new routes, trails, programs and initiatives. | Town staff time to develop education campaign<br>Internal communications fee: $12,000 (per campaign) | Project Lead: Town of Whitby | Initiation: Q1, 2024<br>Ongoing | Number of community members reached (e.g., website visits, social media campaign reach) |

### ACTION 4.7 DECREASE VEHICLE-KILOMETERS TRAVELLED.

| ACTION 4.7 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, a 10% reduction in home to work trips is achieved across the community. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, achieve a 3% reduction in home to work trips across the community. |
| **GHG IMPACT:** | Enabler |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | Not modelled |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 4.7.1 Education: Complete annual commuter survey for Town staff to track home-to-work trips and calculate the GHG emission reductions and additional co-benefits as a result of hybrid work schedules. Following the survey, annually release GHG emissions saved by the Town and other co-benefits tracked in the survey as a way to promote other businesses to continue or adopt hybrid remote policies. | Town staff time to develop education campaign<br>Internal communications fee: $12,000 (per campaign) | Project Lead: Town of Whitby | Initiation: 2026 | Annual commuter survey completed and GHG emissions calculated<br>Number of community members reached (e.g., website visits, social media campaign reach)<br>Number of businesses engaged |

## Reducing Waste Emissions

The low-carbon pathway prioritizes waste diversion over methane capture at landfills. The Town does not operate landfills and uses the Durham York Energy Centre for managing residential waste, while commercial and institutional entities find their own private waste disposal sources. Therefore, the actions to reduce waste emissions focus on educational programming and collaboration with the Region of Durham to further support programming. There is one action category to support reducing waste emissions:

- Action 5.1 Increase residential, institutional, commercial, and industrial (ICI) diversion rates, and decrease waste per capita.

### FUNDING OPPORTUNITIES

The financial analysis did not model investment costs required to meet the 2045 low-carbon scenario's waste emission target, and most of the programming and campaigns associated with Action 5.1 are assumed to fall under the Town of Whitby's budget. The Circular Cities and Regions Initiative provides support, guidance, and peer-to-peer exchange to support local governments in circular economy initiatives. There are several funding opportunities through the Government of Canada related to sector-specific circular economy initiatives, these include:

- Innovative Solutions Canada provides a variety of funding streams related to the circular economy, research, and technology development.

- Low Carbon Economy Challenge is a federal cost share program to implement low-carbon technologies that align with Canada's net-zero emissions by 2050 goal.
- Smart Cities Challenge provides funding for municipalities, local or regional governments, and Indigenous communities to adopt smart cities approaches.
- Strategic Innovation Fund provides investments to all economic sectors to support the Canadian innovation network.

## INTERESTED AND AFFECTED PARTIES

The following interested and affected parties have been identified to support the implementation of the programming and campaigns:

- Local businesses
- Region of Durham
- Local municipalities (e.g., City of Pickering, Municipality of Clarington and Town of Ajax)
- Non-profit organizations (e.g., Salvation Army and Whitby Rotary Club)

## ACTION 5.1 INCREASE RESIDENTIAL, INSTITUTIONAL, COMMERCIAL, AND INDUSTRIAL (ICI) DIVERSION RATES, AND DECREASE WASTE PER CAPITA.

| **ACTION 5.1 OVERVIEW** | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, the residential diversion rates for organics and recycling is 100%. By 2045, the ICI diversion rates for both organics and recycling is 70%. Waste per capita is decreased by 20% by 2030, and 30% by 2045. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, waste diversion is 56% for recycling and 58% for organics. The per-capita waste reduction is 20%. |
| **GHG IMPACT:** | Medium |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | Not modelled |

| **DETAILED SUB-ACTIONS** | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 5.1.1 Program: Conduct a feasibility study for opportunities to partner with community organizations or businesses to develop a community reuse center. | Town staff time to conduct feasibility study | Project lead: Town of Whitby<br>Project Sponsor: Region of Durham | Initiation: 2027 | Feasibility study conducted<br>Partnership with community organization established |
| 5.1.2 Program: Explore options to further develop community reuse programming such as programs or events that encourage repairing products (e.g., Whitby's bi-annual Repair Cafes), or donation events for community organizations. | Town staff time to explore community reuse programs | Project lead: Town of Whitby<br>Project Sponsor: Region of Durham | Initiation: Q4, 2023<br>Ongoing | Number of community events hosted annually |
| 5.1.3 Education: Continue education for residents on waste diversion and reduction opportunities, including through the Whitby Waste Wizard and the Rethink Your Waste Game. | Town staff time to continue education programs | Project lead: Town of Whitby<br>Project Sponsor: Region of Durham | Initiation: Q4, 2023<br>Ongoing | Number of education strategies used<br>Number of people playing the Rethink Your Waste Game on an annual basis |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 5.1.4 Program/Initiative: Continue to support the bi-annual Curbside Giveaway Days piloted by Region of Durham in September 2023. | Town of Whitby staff time to collaborate with Region of Durham<br>Approximately: $13,000 (per event, hosted annually) | Project Lead and Sponsor: Region of Durham<br>Project support: Town of Whitby | Initiation by Q4, 2024<br>Hosted annually | Bi-annual Curbside Giveaway Days completed |
| 5.1.5 Program/Initiative: Convene a circular economy roundtable to investigate the creation of a circular economy initiatives. The Green Municipal Fund provides a seven-step model for developing such an initiative. | Town of Whitby staff to convene a roundtable[14] | Project Lead: Town of Whitby<br>Project Sponsor: Region of Durham | Initiation: 2026 | Roundtable created<br>Seven-step model followed to identify a circular economy community initiative |

## Reducing Industrial and Agriculture, Forestry, and Other Land Use Emissions

Many industrial companies are already exploring how they can increase process efficiency to reduce expenditures, and the major industrial organizations within the town have decarbonization strategies in place. In addition, the cumulative impact of the agricultural sector's GHG impact will naturally decrease due to the conversion of agricultural lands to urban lands. Although the agricultural sector contributes a small amount to the community's total GHG emissions, to meet the low-carbon scenario's targets the sector will need to improve livestock breeding to reduce livestock emissions and electrify end-use processes to reduce fossil fuel emissions. The Town can facilitate advancement towards these targets by collaborating with the industry to release annual progress reports and updates, and exploring new partnerships with agriculture, forestry and other land use (AFOLU) organizations in the area. There is one overarching action:

- Action 6.1 Reduce industrial and agriculture, forestry and other land use (AFOLU) emissions.

### FUNDING OPPORTUNITIES

The following funding opportunities have been identified to support the industrial and agricultural sectors in reducing emissions:

- Utilities financing and partnerships
- Infrastructure Canada and federal funding such as the Agricultural Clean Technology Adoption Program which provides funding for the development and adoption of clean technology or requirement upgrades
- Private investments from the industrial sector, including Gerdau Steel and Atlantic Packaging, to implement initiatives to reduce GHG emissions and avoid carbon price

Interested and Affected Parties

The following interested and affected parties have been identified to support the industrial and AFOLU sectors in reducing emissions:

- Economic development firms
- Atlantic Packaging
- Gerdau Steel
- Durham Agricultural Advisory Committee
- Local tree nurseries and farms

[14] The Federation of Canadian Municipalities's Model for Circularity identifies a seven-step model to develop a circular economy pilot. The model recommends identifying a focus area based on the community's strengths, and identifying potential partners and funders.

## ACTION 6.1 REDUCE INDUSTRIAL AND AGRICULTURE, FORESTRY, AND OTHER LAND USE (AFOLU) EMISSIONS.

| ACTION 6.1 OVERVIEW | |
|---|---|
| **2045 MODELLED LOW CARBON TARGET:** | By 2045, Gerdau Steel has achieved decarbonization of operations and captured 73,286 tonnes of carbon. By 2045, industrial sector process efficiency has improved by 30% and 50% of industrial processes are electrified. By 2045, livestock CH4 and N2O emissions are reduced by 30%. By 2045, agricultural off-road vehicles are 100% electric. |
| **2030 MODELLED LOW CARBON TARGET:** | By 2030, 0.01 tCO2e are removed using Gerdau Steel's carbon capture, and community-wide industrial processes reduce fossil fuel use by 7%.<br>Note: Not all Agriculture, Forestry, and Other Land Use (AFOLU) sectors were modelled, however due to the small cumulative impact of agricultural emissions on the community's emissions the Project Team opted to expand the sub-actions to explore partnerships with all AFOLU sectors. |
| **GHG IMPACT:** | Industrial processes impact: Medium |
| **TOTAL MODELLED INVESTMENT (2023 - 2030):** | Industrial: $31 million |

| DETAILED SUB-ACTIONS | | | | |
|---|---|---|---|---|
| **SUB-ACTIONS** | **INTERNAL IMPACT** | **PROJECT LEAD, SPONSOR, AND SUPPORT** | **TIME FRAME** | **TRACKING METRIC(S)** |
| 6.1.1 Program: Collaborate with the industry, such as Gerdau Steel and Atlantic Packaging, to release annual updates on the progress of decarbonization and actions they can take, including funding available. | Town staff time to collaborate with project supports to release annual updates on decarbonization actions | Project Lead: Town of Whitby<br>Project Support: Gerdau Steel Manufacturer and Atlantic Packaging | Initiation: 2025<br>Ongoing, annually | Annual communication reach to ICI sector on industry trends update |
| 6.1.2 Education: Explore partnerships with Agriculture, Forestry, and Other Land Use (AFOLU) organizations to understand their climate strategies and advocate for the adoption of enhanced resilience and mitigation strategies. | Town staff time to explore partnerships and advocacy | Project Lead: Town of Whitby<br>Project Sponsor and Support: Region of Durham | Initiation by 2026 | Partnerships with AFOLU organizations developed |