
2022

SUSTAINABILITY ANNUAL REPORT



Introduction

The Town of Whitby (Town) continues to implement its Corporate Sustainability Plan. The plan outlines the sustainability goals for the corporation and is focused on understanding the challenges and opportunities the entire community faces today.

This Annual Report follows the 10 principles of the One Living Planning Framework. The 10 principles guide the Town to meet its overall vision for Whitby to be a healthy, sustainable and complete community.

Many sustainability projects and initiatives were accomplished in 2022. Key highlights include:

- Completion of the Zero Carbon Whitby Costing Study and the development of the first carbon budget;
- Establishment of the Zero Carbon Whitby Revolving Fund; and,
- Approval of Phase 1: Resilience of the Community-Wide Climate Emergency Response Plan.

It is anticipated that 2023 will further Whitby's journey to sustainability with some of the priority initiatives, including:

- Completion of Phase 2: Mitigation of the Community-Wide Climate Emergency Response Plan;
- Begin the development of an incentive program to support the implementation of the Whitby Green Standard;
- Completion of a Corporate Waste Management Strategy; and,
- Implementation of the zero carbon projects as identified in the first carbon budget.

One Planet Living

This report follows the One Planet Living Framework. This international framework consists of ten simple principles, clear goals and guidance to help ensure that the Town advances all aspects of social, environmental, and economic sustainability.

-  **Health and Happiness** Encouraging active, social, meaningful lives to promote good health and well-being.
-  **Equity and local economy** Creating safe, equitable places to live and work, which support local prosperity and international fair trade.
-  **Culture and Community** Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.
-  **Land and Nature** Protecting and restoring land and marine systems for the benefit of people and wildlife.
-  **Sustainable Water** Using water efficiently, protecting local water resources and reducing flooding and drought.
-  **Local and Sustainable Food** Promoting sustainable, humane farming and healthy diets, which are high in local, seasonal organic food and vegetable protein.
-  **Travel and Transport** Reducing the need to travel, encouraging walking, cycling and low-carbon transport.
-  **Materials and Products** Using materials from sustainable sources and promoting products that help people reduce consumption.
-  **Zero Waste** Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.
-  **Zero Carbon Energy** Making buildings and manufacturing energy efficient and supplying all energy with renewables.

Projects listed within the report that include a \$ have or are in the process of being considered for subsidization by an external funding opportunity. For more details, please view **Appendix A**.

Health and Happiness

Encouraging active, social, meaningful lives to promote good health and well-being.

2022 Accomplishments

Community

Playground Redevelopments

To support exercise and play, several park playgrounds were redeveloped in 2022, including:

- Greenfield Park
- Wallace Park
- Kiwanis Heydenshore Park Splashpad

New Parks

The Town oversaw the development of the following new park:

- **Micklefield Park**
This new local park, located on the south side of Micklefield Avenue, east of Lockton Street, in the Heathwood Development was opened to the public in Summer 2022. The new park includes a playground, splash pad, soccer field, walkways, tree plantings and a large, naturalized meadow area with pollinator plantings.

2023 Initiatives

Community

Playground Redevelopments

To support exercise and play, several park playgrounds are scheduled to be redeveloped in 2023, including:

- Powel Park Playground
- D’Hillier Park Playground (north)
- Spencer Community Centre Playground
- Rotary Centennial Park Playground
- Lynde House Museum Playground

New Parks

The Town is overseeing the development of several new parks, including:

- **Des Newman WhitBEE Park**
This district park will be themed for bees and nature with 5000 square meters of native plantings, a bee and pollinator-themed playground and a splash pad. Connections to trails will be added throughout the neighbourhood as well as interpretive signage about native bees. Sports opportunities include a multi-skills

court, an illuminated multi-use field with LED lights and pickleball courts. Des Newman WhitBEE Park is expected to be open to the public in Summer 2023. Two trail sections leading into the park have been opened to the public, and many native plantings have been installed along the trails for the residents to enjoy.

- **Lynde Creek Park**

This new district park, located within West Whitby, will include a playground, splash pad, multi-use court, illuminated soccer field with LED lights, walkways, tree plantings and a large, naturalized meadow area with pollinator plantings and created wetland. Lynde Creek Park is anticipated to be open to the public in the Summer of 2023.

- **Chelseahill Park (Name Subject to Change)**

This new local park located in on the east side of Marcel Brunelle Drive, between Beasley Street and Soltys Drive, will include a playground with engineered wood fibre surfacing, a sand play area, a shade shelter, two tennis courts, a walking trail with bench rest areas, and tree plantings. Chelseahill Park is anticipated to be open to the public in the Summer of 2023.

- **Unnamed Park in the Lazy Dolphin Development**

This new local park, located on the west side of Coronation Road between Rossland Road and Maskell Crescent, will include a playground with engineered wood fibre surfacing, sand play area, shade shelter, multi-skills court, sports field, walking trail with bench rest areas and tree plantings. Construction of the park is anticipated to start in the Summer of 2023 and be open to the public in the Spring of 2024.

Whitby Sports Complex (\$)

The Town is designing a new Whitby Sports Complex to help meet our growing community's immediate and future recreational needs. The new complex will be located on the west side of Baldwin Street South, South of Highway 407. This new complex will offer a variety of amenities, including:

- A twin-pad arena with 85' by 190' ice pads
- Indoor Aquatics Centre
 - With a 10-lane pool (the largest in Durham Region)
 - A separate leisure pool
- Double gymnasium
- Wellness Studio/Multi-Purpose Space
- A 3-lane Indoor walking track
- Meeting rooms and arts and cultural spaces
- Outdoor recreational program areas, including:
 - A Multi-Use Sports Field
 - 4 Pickleball Courts
 - 3 Basketball Courts
 - 3 Tennis Courts

- Outdoor Event Plaza Space
- Children's Playground
- Skateboard Park and Pump Track
- Electric vehicle (EV) charging stations

Public art will be integrated throughout the site to highlight the culture of the Town. To align with the Town's commitment to climate change, LEED Gold and Zero Carbon Building (ZCB) certifications will be achieved for the development. The design for the future Whitby Sports Complex and surrounding park will be finalized, with construction anticipated to begin in 2023.



Figure 1 Rendering of the Proposed Park for the Whitby Sports Complex

Parks Trails and Wayfinding Signage Design Project

The Parks Trails and Wayfinding Signage Design project would develop and create a coordinated sign design for the Town's parks and trails signs to improve wayfinding.

Corporate

Parks and Recreation Master Plan

The Town has begun the process of updating its Parks and Recreation Master Plan to help identify actions to support future recreational services and infrastructure. Once complete, the updated plan will present a vision, as well as long-term goals and objectives, for how the Town will continue to meet the recreational needs of our growing community well into the future. It will be an actionable strategy that addresses:

- The type and location of future park and recreational opportunities and amenities required to support Whitby's quality of life
- Service standards, policies, and programs for recreation and parks facilities and services
- Required improvements to parks, trails, and open spaces

Public consultation on the plan has involved a public survey in January 2023 and three public consultation sessions in February 2023.

Cullen Master Plan

The Town has developed a Cullen Central Park Master Plan to maximize the potential of the park, which was once known as Cullen Gardens. This park is connected to Heber Down Conservation Area, and together, makes some of the most significant stretches of publicly accessible greenspace in Whitby. In 2023, the Town will be hiring a Design Consultant to prepare conceptual plans, conduct community engagement, prepare tender documents, and oversee the construction of the Cullen Central Park Master Plan.



Culture and Community

Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.

2022 Accomplishments

Community

Whitby Sustainability Advisory Committee

The Whitby Sustainability Advisory Committee (WSAC) is a community-based committee of Council whose role is to promote sustainability, support environmental management, and respond to climate change. In 2022, WSAC led several initiatives, including a free screening of a documentary to raise awareness on waste in Lake Ontario for World Water Day, a community tree planting and supported the Year of the Garden celebrations in partnership with the Whitby in Bloom Committee.

Story Walks

The Whitby Library, in partnership with the Town, installed a story walk; a fun educational activity that places children's picture book pages along a popular walking route. The story walk was in Whitby Civic Park with the book titled "Have You Seen My Yak?" written by Tammy Gay and David Benjamin and illustrated by Durham Region youth.

Corporate

Corporate Energy Team

The Corporate Energy Team includes staff from across the organization who are involved in initiatives dealing with energy management and consumption, and impact greenhouse gas (GHG) emissions. The integrated team supports the implementation of the Town's Corporate Energy and GHG Reduction Plan. In 2022, this team supported initiatives including:

- Assisting with the identification of low-carbon capital projects
- Energy and emissions reporting
- Development of the Town's first Carbon Budget

Staff Earth Day Quiz

Town staff were invited to celebrate Earth Day on April 21, 2022, by participating in a lunch-hour virtual eco quiz. Participants were asked several environmentally focused questions testing staff on environmental knowledge.

2023 Initiatives

Community

Eco Events

There are several significant days for environmental action that the Town will continue to celebrate in 2023, through eco-activities and educational events and awareness campaigns. These days include:

- World Water Day - March 22
- Earth Hour - March 25
- Earth Day - April 22
- Provincial Day of Action Against Litter - May 9
- World Environment Day – June 5
- Bike to Work Day - May 19
- World Bee Day - May 20
- Pollinator Week - June 19-25
- National Forestry Week - September 17-23
- National Tree Day - September 20
- Car-free Day - September 22
- Energy Efficiency Day - October 4
- Walk to School Day - October 4
- Waste Reduction Week - October 16-22
- International Day on Climate Action– October 24



Protecting and restoring land and aquatic systems for the benefit of people and wildlife.

2022 Accomplishments

Community

LEAF Backyard Tree Planting Program (\$)

2022 was the second year of the Council approved five-year contract for the subsidized Backyard Tree Planting Program to property owners of Whitby. This program is delivered by the not-for-profit organization LEAF and is in partnership with the Region of Durham. In addition, the program received \$5,000 in sponsorship from Elexicon Energy to help offset the Town's costs to deliver the program. During Year 2 (July 2021 – June 2022) of the program, 68 trees were planted in Whitby and in the first half of Year 3 of the program (July 2022 to December 2022) 61 trees were planted.

Establishment of the LEAF Community Greening Program

In September of 2022, Council approved a new 4-year Community Greening Program to be delivered by LEAF. The program was developed to support tree planting and ongoing community-based maintenance initiatives allowing for long-term and consistent delivery of community tree planting, maintenance, educational programs, and events open to all members of the community, including organizations, community groups, individuals, and families. The program includes two annual community tree planting events (a minimum of six hundred trees per year), one community maintenance event per year and one education event per year (such as a tree tour or educational workshop).

Earth Day Boulevard Blitz

The Town encouraged residents to spend 20 minutes collecting litter around their neighbourhood to celebrate Earth Day.

Canada Forest Week and National Tree Day

The Town celebrated both National Forest Week (September 18-24, 2022) and National Tree Day (September 21, 2022) by hosting an interactive Tree ID session in celebration of National Tree Day (September 21) to help community members learn how to identify common trees found in Whitby.



Figure 2 Tree ID session in celebration of National Tree Day

Free Conservation Lands and Ontario Park Passes

In partnership with [CLOCA](#) (Central Lake Ontario Conservation Authority) and [Ontario Parks](#), the Whitby Library lends passes that grant free day-use access to the conservation areas and [provincial parks](#). These loans encourage residents to explore and appreciate our local natural assets and sustainable outdoor activities.

Community Tree Planting Events

Two community tree-planting events took place in 2022, one in the Spring at Peel Park and the other in the Fall at D’Hillier Park. The Town collaborated with LEAF to deliver both events. Through these two events, members of the community assisted with planting over 650 trees to help increase and enhance Whitby’s urban forest.



Figure 3 Volunteers planting trees at D’Hillier Park

Community Pollinator Planting Event at Vanier Park

The Town Sustainability staff with community volunteers participated in a Pollinator Planting Event to plant over 290 native pollinator plants including wild columbine, milkweed, wild strawberry, cardinal flower, new England aster, prairie smoke and an assortment of tall prairie grasses to help provide better habitat for bees, butterflies and beneficial insects at Vanier Park.

Corporate

Tree Cities of the World

[Tree Cities of the World](#) is an international effort through the Arbor Day Foundation, the Food and Agriculture Organization of the United Nations, alongside its Canadian partner, Tree Canada, to recognize cities and towns committed to ensuring that urban forests and trees are properly maintained, sustainably managed, and duly celebrated. Whitby was successful in our 2022 Tree Cities of the World application.

Staff Tree Planting

In Spring 2022, Town staff were invited to participate in the Canadian-wide Earth Day tree-planting relay planting 50 native trees to celebrate the 50th anniversary of Earth Day.



Figure 4 2020 Earth Day Tree Relay

2023 Initiatives

Community

Earth Day Celebrations

The Town provided residents several ways to participate in Earth Day (April 22) and Earth Week (April 17-23) celebrations through several eco-inspired activities, including a community planting and a free movie screening of *Kiss the Ground*. The documentary focuses on one of our greatest challenges: balancing the climate and securing our future.

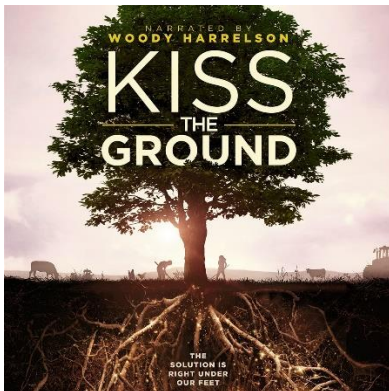


Figure 5 The poster of the movie *Kiss the Ground*

Community Greening Program

Through the Community Greening Program, the Town in Partnership with LEAF hosted a tree-planting event on Earth Day at D'Hillier Park. Over 300 trees were planted through this event. As a part of this program, a second community maintenance event will be held in June, and a tree education event and a second community tree planting event will be held in the Fall.

Fleet to Trees

Fleet Services continues with the [Fleet to Trees™ program](#), where with every new vehicle the Town purchases, new trees are planted within Whitby to help create mini forests that can act as carbon sinks in local parks. In 2023, several trees will be planted through this program.

Canada Forest Week and National Tree Day

The Town will be celebrating National Forest Week (September 17-23) and National Tree Day (September 20, 2023) by hosting several activities to help increase our awareness and appreciation for the benefits of trees.

Durham Meadoway

The Meadoway is a regional trail network proposed to link Greater Toronto Area communities between the Don River and Oshawa. The Region of Durham Planning Division (Transportation Planning Section) is coordinating the Durham Meadoway Visioning Study in partnership with the City of Pickering, the Town of Ajax, the Town of Whitby and the City of Oshawa. One of the preliminary guiding principles of the Study is the Natural Environment. The Meadoway will protect sensitive plant and animal habitats and seek opportunities to enhance biodiversity, will provide opportunities for visitors to learn about the natural environment and encourage community stewardship. The Visioning Study will take place over a three-phase process, concluding in Fall 2023.

Corporate

Tree Cities of the World

When the program launched in 2019, Whitby was one of only 59 cities worldwide to receive this designation. Since then, the program has increased to 120 cities Worldwide. Whitby continues to meet the commitments of the programs and will reapply for this designation in 2023.

Urban Forest Management Plan

In 2023, the Town will be developing its first Urban Forest Management Plan. The Plan will provide recommendations to improve tree health and diversity, increase tree cover, cope with climate change, reduce risk to the public, and increase the wide-ranging benefits of a sustainable, healthy, and safe urban forest.



Figure 6 Whitby Urban Forest Streetscape

Sustainable Water

Using water efficiently, protecting local water resources, reducing flooding and drought.

2022 Accomplishments

Community

Drinking-Water Stations

The Town has increased the number of drinking water stations throughout several municipal facilities to promote reusable water bottles. Additional water fill stations were added to the Operations Centre in the winter control and parks depot, two locations in the Iroquois Park Sports Centre and two locations at the McKinney Centre.

Seabin Initiative

In 2021, 16 [Seabin](#) devices were installed across Ontario, including the Port Whitby Marina, as part of the [Lakes Plastic Cleanup initiative](#) to collect litter, help researchers study plastic pollution in our waterways as well as reinforce the importance of “Reduce, Reuse, Recycle”. In 2022, the Great Lakes Plastic Cleanup Team hosted several events where they invited volunteers out to help sort and classify the plastic waste captured from our the Seabin devices located in Whitby.

Canada Water Week Celebrations

The Town partnered with the Whitby Public Library on World Water Day (March 22) to host a free screening of the documentary "[SHORELINE: The Paddle Against Plastic](#)," an inspiring film that follows Rochelle Byrne as she embarks on a 430 km paddle journey across Lake Ontario to raise awareness about plastic pollution. A live question and answer session with Rochelle followed the screening.



Figure 7 Canada Water Week Movie Screening

Corporate

Vanier Park - Habitat Enhancement and Stormwater Runoff Management

In 2022, invasive species were removed from the banks of the dry storm pond on the west side of Vanier Park and over 290 native plants were planted to help manage stormwater runoff and enhance the habitat.

Bridge/Culvert Master Plan – Hydraulic Capacity Assessments

The Bridge/Culvert Master Plan was completed to assess the Town's culverts and bridges compliance with the Town's current engineering standards, flood resiliency, assessment of climate change impacts, and potential future capital/mitigation expenditure prioritization. The results of the Study will be used to inform the Transportation Infrastructure Resilience Program that will be required in the next few years to complete additional studies and designs to upsize watercourse structures, identified as highest priority structures through flood risk assessments Bridge/Culvert Master Plan study. Under this program, culvert and bridges identified as highest priority structures will be upsized to meet design and regulatory requirements with further consideration given to climate change impact.

Rowe Channel Upgrade Study Environmental Assessment

In partnership with Central Lake Ontario Conservation Authority (CLOCA), the Town conducted a Municipal Class Environmental Assessment (EA) Study to identify possible improvements to Rowe Channel, which was completed in August of 2022. Based on the evaluation results, the preferred solution is replacing the existing channel with an open channel lined with armour stone which is a long-lasting solution that will mitigate long term erosion concerns. In addition, this alternative will reduce flood risks, promote the removal of invasive species and improve fish habitat and passage through the channel.

2023 Initiatives

Community

Waterfront Regeneration Trust

Waterfront Regeneration Trust is a municipal grant program to external agencies to promote the waterfront trail, installation of signs, attract public and private investment for the expansion, enhancement and promotion of the trail.

Drinking-Water Stations

In 2023 the Town will continue to increase the number of drinking water stations throughout several municipal facilities to promote reusable water bottles. So far in 2023, additional water fill stations have been added to the Town Hall and the Marina.

Corporate

Harbour Dredging/Flooding Mitigation

The sediment (the soft, solid material, like sand and mud) at the bottom of Whitby Harbour contains levels of chemicals that could be harmful to fish, birds or humans. The contamination has been traced to an adjacent upstream property along Pringle Creek, and over time, the contaminated sediments were carried downstream by Pringle Creek into Whitby Harbour. Public comments on the Project were invited by the Impact Assessment Agency of Canada in July of 2022. Fisheries and Oceans Canada (DFO) developed a Remedial Action Plan to guide the cleanup (remediation) of the Harbour. An updated Remedial Action Plan for the Project was received in January 2023. The next step is to undertake the detailed design work, including submitting applications and requests for permits to achieve the appropriate regulatory approvals to proceed with the Project.



Local and Sustainable Food

Promoting sustainable, humane farming and healthy diets are high in local, seasonal, organic food and vegetable protein.

2022 Accomplishments

Community

King Street Cooperative Community Garden (KSCCG)

The Town is working with a local community group to create a community garden at the King Street Parkette to demonstrate permaculture gardening methods. The King Street Cooperative Community Garden (KSCCG) was approved by the Town in Summer 2022 and the community group was able to start construction of their community garden planting area which will be created using the sustainable design principals of permaculture.

Whitby Public Library Seed Share (WPLSS)

Seed Saving is a growing movement that supports sustainable gardening practices and a healthy lifestyle by preserving genetic diversity and fostering an awareness of nature. The Whitby Public Library Seed Share provides access to locally saved seed and knowledge for anyone interested in growing food, attracting pollinators, saving their own seed and contributing to this public resource. For more information visit www.WhitbyLibrary.ca/seedshare

Pollinators

In 2018, Whitby was designated the 10th Bee City in Canada and the first in Durham Region. The Bee City designation is awarded to municipalities that declare to protect pollinators and their habitat through action and education. In 2022, the Town undertook several measures as identified throughout this report to maintain the Bee City status including educational seminars, community plantings, and provided native wildflower seed packets to community members who participated in a community engagement survey for the development of the Town's Climate Emergency Response Plan (CERP) - Phase 1: Resilience.



Alveole Beekeepers Presentations (\$)

As a part of the Town's Urban Rooftop Beehive Program sponsored by Elexicon Energy Alveole Beekeepers delivers at least two hands-on educational workshops throughout the year. In 2022 the following workshops were held:

- World of Bees Presentation - This presentation focussed on urban beekeeping, beehives, and bee's life journey; from the moment bees emerge from their cell to their final flight.
- Meet the Beekeeper Workshop - As a part of the pollinator week (June 20 to 26) celebration Alveole Beekeepers provided a presentation on the hive's different products including wax, pollen, honey and more. The Participants received a jar of honey sourced from the Town Hall urban beehive.

Whitby in Bloom

Whitby in Bloom presents annual events, including webinars, speaker series and the annual garden tour. The webinars and speakers focus on horticultural, landscape and environmentally responsible projects. In 2022, several sessions were hosted, including Mix and Match: Plants and Shrubs for Pollinators on April 27 and a session titled Trees, a wise investment, on May 25.

2022 Year of the Garden – Whitby Garden Tour

The Town, in partnership with the Whitby in Bloom Committee, hosted a tour to 11 gardens, Cullen Central Park, the Lynde House and nine other private residences. In lieu of a tour fee, non-perishable food items were collected at designated tour stops and donated to local food banks.



Figure 8 A picture of a garden on the tour

Corporate

Seeds to Bees

In 2021, a native plant nursery was established to assist community-planting efforts. This nursery enables the Town to sustainably grow native plant stock, which was used to expand native plant gardens across the Town in 2022. The development of a native garden using the plant stock from the nursery was successful. Most of the native flowers responded well and were planted in Windsor Bay Park and Suse Eggert Park.

Urban Rooftop Beehive (\$)

The Town has an urban beehive on the rooftop of Town Hall, sponsored by Elexicon Energy and maintained by Alveole Urban Beekeepers. The Town extracts approximately 10 kilograms of honey from its rooftop beehive each year. The honey is bottled into 100 small jars and gifted to volunteers and handed out as prizes during community events.

2023 Initiatives

Community

King Street Cooperative Community Garden (KSCCG)

The garden group intends to help foster a community that supports growing local food, and healthy active lifestyles and supports pollinators in King Street Park located in downtown Whitby. Future garden workshops will be hosted by the KSCCG in this space, such as being part of local garden tours, and yoga in the park. As well, Durham College students will help construct the garden shed and accessible raised garden planting areas for the community garden to gain real-world experience as a part of the carpentry program that the college offers.

Whitby in Bloom

Whitby in Bloom presents annual events, including webinars, speaker series and the annual garden tour. The webinars and speakers focus on horticultural, landscape and environmentally responsible projects. In 2023, several virtual gardening seminars have been conducted, including Gardening for Climate Change on March 1, Vegetable Gardening in Containers on March 8 and Gardening for Pollinators on March 15. Future in-person sessions are planned, including Annual & Perennials: Growing and Maintenance on April 26, and Gardening As We Age on May 24.

Pollinator Week

Pollinator Week (June 19-25) is a time to celebrate the vital role of pollinators like bees, birds, bats, and butterflies in our local ecosystem and support global food production. The Town is committed to protecting pollinators and their habitat through action and education as a designated Bee City. As part of that commitment, the Town is planning several fun activities and workshops for residents to take part in and learn more about why pollinators matter.

Corporate

Jeffery Park Native Plant Habitat Improvement (\$)

In 2023, the Town received a grant of \$2,000 from Pollinator Partnership which was allocated to expand the native plant habitat in Jeffery Park to help protect pollinators. Staff were invited out to Jeffery Park in celebration of Earth Week on April 21 to assist with the planting of over 350 native plants and shrubs.

Seeds to Bees

The Seed to Bees native plant nursery has been growing and as Spring 2023, there are over 80 flats of native plant species. Staff events are being planned during pollinator week (June 19 to 25) to assist the native plant nursery team with re-potting all the plants into larger pots.

Mayors' Monarch Pledge

The Town will continue their efforts to protect pollinators through participation in the Mayors' Monarch Pledge in 2023. This is a program led by the National Wildlife Federation. Through this initiative, Whitby is committed to creating a habitat for the monarch butterfly and pollinators and educating residents about how they can make a difference at home and in their community. To participate, the Town must commit to at least three action items (out of 30) that the community will initiate throughout the year. In 2023 the Town has committed to the following actions:

- Launch or maintain a public communication effort to encourage residents to plant monarch gardens in their homes or neighbourhoods.
- Launch, expand, or continue an invasive species removal program to support the re-establishment of native habitats for monarch butterflies and other pollinators.
- Display educational signage at monarch gardens and pollinator habitats.
- Increase the percentage of native plants, shrubs and trees that must be used in city landscaping ordinances and encourage the use of the milkweed, where appropriate.



Figure 9 Monarch Butterfly on Milkweed



Travel and Transport

Reducing the need to travel, encouraging walking, cycling and low-carbon transport.

2022 Accomplishments

Community

Active Transportation Plan

The Town's Active Transportation Plan (ATP) encourages people to use transit, walk and cycle more often and strives to make our community more connected, accessible and safer for everyone. The Town's Active Transportation Plan (ATP) was updated and endorsed by Council in 2021. Implementation of the updated ATP commenced in 2022. In 2022, the Town completed a lane diet on Dryden Boulevard, between Thickson Road and Thornton Road, by reducing the number of lanes for vehicles and providing a dedicated lane for cycling.

Corporate

Bicycle Friendly Community

The Town supports cycling through a network of bike routes, shared roads, multi-use paths and trails. Whitby is a bronze-level [Bicycle Friendly Community](#), which means we are working hard to create more safe places to ride, along with cycling education and programming.



Trail Improvements

In 2022, the Town constructed new trails and made several trail improvements to Whitby's existing active transportation infrastructure projects, including:

- a. Lynde Creek Trail - Dundas to Bonacord
- b. Minto Development Trail that connects Deverell Park to Thickson Road and Dryden Boulevard through the open space lands
- c. The installation of 11 new bench rest areas along existing trails in Whitby
- d. King Street Park walkway

Fleet Master Plan

The Town completed a Fleet Master Plan to address long-term fleet needs to deliver services to the community. The final plan highlights actions, strategies, and benchmarks that can be implemented to support the Town's current needs with the flexibility and resilience to adapt to changes in future growth in the Town.

Electric Vehicle Charging Stations (\$)

The Town of Whitby currently has nineteen (19) electric vehicle (EV) charging stations that were installed in December 2021 as a part of the Zero Emission Vehicle Infrastructure Program (ZEVIP) administered by Natural Resources Canada. From December 2021 to December 2022 there has been approximately 1,130 charging sessions that has helped in saving GHG emissions of 10.7tCO₂e which is equivalent to 3,277 passenger cars off the road.



Figure 10 Level 2 EV Charging Station at McKinney Centre

2023 Initiatives

Community

Trail Construction, Improvements and Expansion

In 2023, the Town intends to construct new trails and make several trail improvements to Whitby's existing active transportation infrastructure projects, including:

- a. Florence Trail
- b. Waterfront Trail LCBO Boardwalk
- c. Waterfront Trail redevelopment - Corbett Creek Bridge (replacement) to Intrepid Park
- d. HEPC Trail connection from Longwood Park to Thickson Road
- e. Lynde Creek Trail from Lynde Creek Park to Fruitful Crescent
- f. A new section of trail connecting Longwood Park to Thickson Road through the Hydro Electric Corridor
- g. Replacing the boardwalk connecting the Ashburn Community Centre with Ashburn Park
- h. The reconstruction of multiple sections of trail within the Town's network that are in poor condition and beyond their serviceable life, including the John Hulley Trail adjacent to Brooklin Memorial Park

Active Transportation Plan

As outlined in the ATP, safe connectivity of Whitby's active transportation corridors between areas of residential uses and destinations is important for residents to travel and feel comfortable. The Town's ATP identifies the active transportation facilities to support pedestrians, cyclists, etc. The projects in the program are for roadway active transportation facilities, which include on-road bike lanes, sharrows, paved shoulders, and in-boulevard multi-use paths. The following projects are scheduled for 2023: installation of several Pedestrian Crossovers to support pedestrians, the addition of a centreline on Multi-Use Paths to separate users by direction of travel and enhancing the on-road cycling on Mary Street.

Corporate

Electric Vehicle Charging Stations (\$)

The Town has applied to Round 3 and Round 4 of the Natural Resources Canada's Zero Emission Vehicle Infrastructure Program. If successful in obtaining the funding, the Town will be notified in 2023 and it will be used to expand the Town's EV Charging Station network in 2024 and 2025.

Greening the Town's Fleet

Fleet services is in the process of securing 10 Plug-in Hybrid vehicles that can utilize the EV charging station installed in the Operations Yard. Fleet is pursuing reduced sized vehicles and investigating purchasing pick-up trucks compared to the standard half-ton.

Water St. Environmental Assessment (EA)

An EA was undertaken to assess road re-alignment options, streetscape enhancement and geometric modifications to address parking and drainage issues and to promote active transportation in order to attract more Whitby residents to enjoy the waterfront. The EA study is anticipated to be completed by the end of 2023.



Zero Waste

Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.

2022 Accomplishments

Community

Waste Reduction Week

In 2022, the Town celebrated waste reduction week (October 17 to 23) by:

- Council officially proclaimed Waste Reduction Week in Whitby
- Educational social media and web campaign promoting best sorting techniques
- Promoting the Town's online Rethink Your Waste Sorting Game
- Promoting the Town's Anti-Litter App
- Hosting several waste-themed community events

Waste Reduction Webinar- Second Harvest on Food Waste Reduction

As a part of the Waste reduction week celebration, Second Harvest provided a presentation on October 19 about the misconceptions around best before labels and how to maximize the shelf life of food through proper storage. Second Harvest is Canada's largest food rescue organization and is a global thought leader on perishable food redistribution.

Waste Reduction Story and Craft Time

The Town, in partnership with the Whitby Public Library, hosted a waste-themed story time on October 22 that focused on the "4Rs"; Reduce, Reuse, Recycle and Recover. After the story time, children were provided with an opportunity to put their new knowledge to work making a zero-waste craft. For this activity, old plastic water bottles were repurposed into Halloween-themed planters and were planted with succulent plants for the children to take home.



Figure 11 Water bottle planters

Repair Café

The Town hosted its first pop-up Repair Café at the Whitby Central Library on October 22. The Repair Café consisted of volunteers who shared their repair knowledge and helped community members fix their household items such as computers, electronics, small appliances, small furniture, clothes, jewellery, books, bikes and more. This event created a platform for knowledge sharing and prevented items from ending up in landfills.



Figure 12 Volunteers helping visitors fix their items at the Repair Café

Waste Sorting Game – Rethink Your Waste

The Whitby Sustainability Advisory Committee helped sponsor a Waste Sorting Game through the Town's website and Whitby Waste Buddy App. The game allows residents to test their knowledge on how waste is sorted in Whitby. In 2022, over 2,805 games were played. The average session length per game was 6 minutes. With over a year of data, Staff could see which items were most misunderstood. These items included dirt, rocks, soiled newspaper, motor oil and liquor bottles. Staff were also able to view when residents were seeking answers to specific questions, for example, October spiked in numbers leading the Town to frame messaging to include pumpkins, and a similar spike occurred in April in connection with the messaging surrounding dirt. This information was passed on to communications to inform future campaigns.

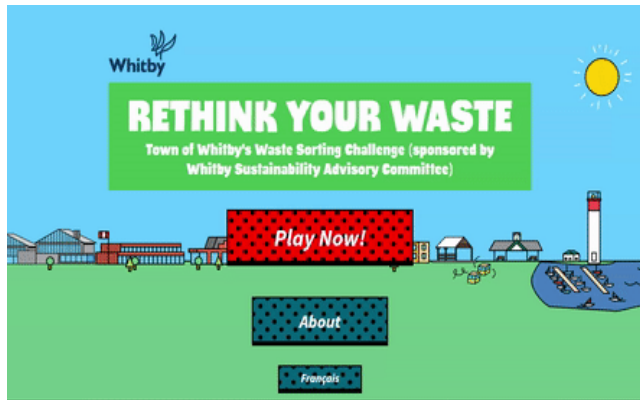


Figure 13 Rethink Your Waste Game

Community Cleanup Online Tool

The Town launched the Anti-Litter App in May of 2021 to support the Provincial Day of Action on litter. The app allowed residents to pre-register for a one-time community cleanup or make a longer-term commitment to adopt and clean a road, park or trail. In 2022, there were more than 26 cleanups and 13 adoptions of parks, trails and roads.

Updated Special Large Item Bulky Collection Program

In January 2022, the Town's Special Collections program was updated in response to recommendations made in the 2019 GHD Review of Solid Waste Services. Changes included the introduction of a collection fee, re-routing for operational optimization, and the implementation of an online booking and payment tool. These operational and administrative changes to this program have helped to optimize the Town's existing fleet, increased the efficiency of routing, and as a result, reduced fuel consumption. By introducing a small monetary fee, a reduction in the "non-set-outs" has been observed.

Corporate

Staff Swap Event

In celebration of Waste Reduction Week on October 21, staff were invited to participate in a Staff SWAP Event. Staff were encouraged to bring their gently used books, clothing, accessories, or small household items and swap them for free. In the spirit of the sharing economy, participants were encouraged to "bring an item to take an item".

Purchasing Department - Records Retention

Since 2020 the Purchasing team has been completing the paperless filing of all project documentation, reducing the need to manage and store over 120 paper folders annually which is equivalent to approximately 22 storage boxes being eliminated.

Electronic Procurement Process

In 2022, the Corporate Purchasing Team posted 85 projects on the digital e-Bidding platform to avoid the usage of paper for completing the bidding process.

2023 Initiatives

Community

Waste Reduction Week

The Town will be celebrating Waste Reduction Week (October 16 to 22) by hosting environmental events that focus on the principles of circular economy, resource efficiency, and waste reduction.

Provincial Day of Action on Litter

In Ontario, the Provincial Day of Action on Litter is celebrated on the second Tuesday of May. In recognition of this day, in 2023 the Town will encourage community members to complete a one-time cleanup or to adopt public spaces, which can be scheduled through the Anti-litter App: www.whitby.ca/cleanup.



Figure 14 Volunteer completing a Park Cleanup

Online Waste Collection Calendar

The printed waste calendar has been a valuable resource for residents, however in recent years, there is an increasing readership of online content. In the Summer of 2021, a public survey was conducted asking residents about the printed waste collection calendar. Approximately 78 percent of the 1,296 survey respondents indicated they supported going paperless with this publication. Based on the survey results, environmental and cost benefits of going paperless, the Town, along with the Region of Durham and the City of Oshawa went paperless in 2023 and residents are directed to the Waste Buddy App for their collection schedule.

Preparation for Expanded Green Bin Program and Blue Box Transition to Full Extended Producer Responsibility

The Region of Durham completed its Long-term Waste Management Plan (2022-2040), which outlines a few initiatives intended to help achieve future waste reduction targets and also meet GHG emissions reduction goals. Initiatives include moving to an expanded Green Bin Program that will introduce Pet Waste and Diapers to the Source-separated organics program as the Region transitions to new processing technologies. While this change will effectively divert significant tonnage from the disposal, it will have a significant impact on the Town's waste collection operations. Staff will be utilizing 2023 as a year to map out changes and plan for any operational adjustments needed to maintain our level of service to residents. Similarly, the Region of Durham is scheduled to transition to a full Extended Producer Responsibility (EPR) Model for the Blue Box recycling program by 2024. Working closely with the Region of Durham and Producer Organizations in 2023 will be key to ensuring a smooth transition for 2024.

Corporate

Provincial Day of Action on Litter

On May 9, 2023, the Provincial Day of Action on Litter, Town staff will be invited to participate in a 20-minute litter cleanup.

Corporate Waste Management Strategy

A Corporate Waste Management Strategy is being developed by the Town in 2023 to support the recommendations within the Zero Carbon Whitby Framework to target zero waste by 2040 and aligns with the goals of the Corporate Sustainability Plan. The aim of the Corporate Waste Management Strategy will be to ensure waste is diverted away from permanent disposal, directly resulting in a reduction in emissions. Corporate Waste Audits will be conducted to understand the waste types and volumes; this will inform the development of a Corporate Waste Management Strategy which will identify how waste can be reduced through municipal operations.

Sustainability Considerations in Purchasing Policy

Sustainability considerations will be included in the Town's Purchasing Policy which will encourage the procurement of goods and services that reduce GHG emissions and preserve the natural environment. Lifecycle cost analysis may be required to ensure that goods and services are financially viable and available at competitive prices.

Office Supply contract for all Town Departments

The Town switched to a new vendor to support office supply needs. This vendor requires all suppliers to provide a letter of compliance for their environmental mandate and green commitment. The new vendor also re-uses approximately 25 percent of boxes for dispatching orders and has set higher minimum order thresholds to limit excess deliveries that will reduce the carbon footprint of the order. The vendor also provides a virtual catalogue with an array of ecological product alternatives.

Zero Carbon Energy

Making buildings and manufacturing energy-efficient and supplying all energy with renewables 2022 Initiatives.

2022 Accomplishments

Community

Whitby Green Standard

The Whitby Green Standard is an existing framework that allows for a flexible approach for addressing climate change and sustainable design criteria in all new buildings. In 2022, over 80 new Site Plan and Plan of Subdivision applications were reviewed to ensure compliance with the Whitby Green Standard. Several of the applicants elected to exceed the mandatory requirements of Tier 1, by opting to complete a number of optional Tier 2 and Tier 3 performance measures, or voluntary measures.

Climate Emergency Response Plan

The Whitby Climate Emergency Response Plan is the primary mechanism to respond to a changing climate across the community. Due to the complexity and different approaches necessary to fully understand the response needed to address climate change, the Whitby Climate Emergency Response Plan has been divided into two phases:

- Phase 1: Resilience
- Phase 2: Mitigation

Phase 1 involved the development of a Resilience Plan, which was approved by Council in September 2022. The purpose of the plan is to address the climate changes we already experience in Whitby and expect to experience in the future, even with the adoption of GHG emissions mitigation measures. Risk and vulnerability modelling was done by developing two future scenarios for the Town:

- An **adapted scenario**, where measures to reduce the direct and indirect risks of climate change are applied across the community; and
- A **business-as-usual scenario**, which includes growth and development without a climate adaptation lens.

To support the achievement of the adaptation actions, a detailed five-year community-led implementation plan has been developed.

Phase 2 involves the development of a Mitigation Plan. Through an interim report to Council in September 2022 on the Mitigation Plan, the following short, medium, and long-term targets to reduce community GHG emissions were approved by Council:

- 20 percent reduction by 2025, below 2019 levels
- 40 percent reduction by 2030, below 2019 levels

- 100 percent reduction by 2045, below 2019 levels

Based on the approved community GHG emissions reduction targets, low carbon pathway modelling was conducted in the Fall of 2022.

Greener Homes Durham Residential Retrofit Program

In 2022, the Region of Durham launched the [Durham Greener Homes Program](#), its “Deep Retrofit Program,” as identified within the Durham Community Energy Plan. This program will help stimulate energy retrofits of existing residential buildings. The Town has promoted the program and encouraged Whitby residents to participate in the program.

Race to Resilience and Race to Zero

[Race to Resilience](#) and [Race to Zero](#) are global campaigns run by the COP26 Presidency and high-level Climate Champions. The purposes of these campaigns are to rally leadership and support from cities, regions, businesses and investors to help frontline communities build resilience and adapt to the impacts of climate change while also reducing GHG emissions to stay within the 1.5°C global temperature increase as outlined in the 2016 Paris Agreement.

In 2021, Council endorsed joining these campaigns. By joining Race to Resilience and Race to Zero, Whitby joined cities worldwide in committing to be catalysts for change while also demonstrating the commitment to and delivery of the goals of the Paris Agreement and COP26. In 2022, to meet the requirements of this campaign, Whitby reported all its climate actions through the Carbon Disclosure Project.

Corporate

Zero Carbon Whitby

Zero Carbon Whitby was endorsed by Council in March 2021; this plan serves as the Town’s Corporate Energy Management Plan and Corporate Climate Adaptation Plan.

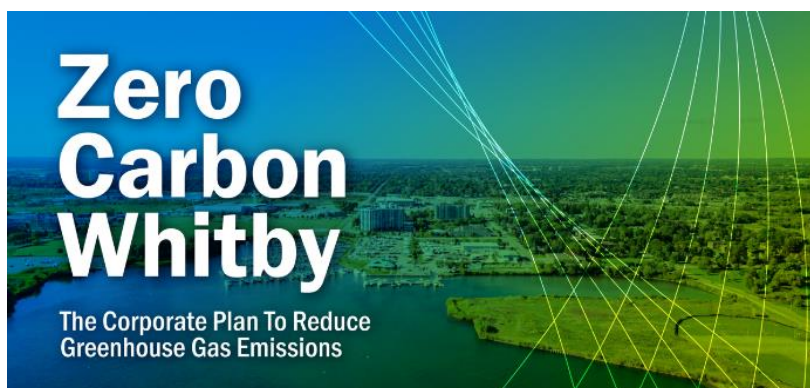


Figure 15 Zero Carbon Whitby

Zero Carbon Whitby has been developed as a framework for implementing a low carbon decision mechanism across the organization. The Plan derives the fair amount of

emissions that Whitby's corporate operations have to reduce to support global GHG emission reduction targets.

As part of the plan, Council approved short, medium, and long-term targets to reduce corporate GHG emissions, namely:

- 20 percent GHG emissions reduction by 2025, below 2019 levels
- 40 percent GHG emissions reduction by 2030, below 2019 levels
- 100 percent GHG emissions reduction by 2045, below 2019 levels;

This target was developed to reflect the Town's contribution to limiting the global annual average temperature increase to 1.5°C.

Embedded within Zero Carbon Whitby is a Carbon Reduction Framework, an overarching framework for GHG emissions management, extending over multiple years and all aspects of municipal operations. This framework empowers staff to develop and implement actions from the bottom up to meet GHG reduction targets by aligning capital and operating budgets with GHG reduction targets.

Zero Carbon Whitby Costing Study (\$)

As the first step of the implementation of the Zero Carbon Whitby Framework, the Zero Carbon Whitby Costing Study was completed. The Study was one of the main recommendations of the Zero Carbon Whitby Framework. The Zero Carbon Costing Study provides a detailed implementation plan for the Town to remain within its carbon budget and reach zero emissions by 2045. The Zero Carbon Costing Study provides a schedule and incremental budget for the Zero Carbon Whitby Plan that optimizes the Town's corporate carbon budget with its existing capital budget and asset management plans. It also provided guidance on the establishment of the Zero Carbon Revolving Reserve Fund.

The estimated incremental cost of this work between 2022 and 2045 is \$63.7 million. In return, over the same period it estimated there will be \$75.3 million in total savings and avoided costs.

The Study proposes that this incremental cost could be paid for entirely from a Zero Carbon Revolving Reserve Fund, seeded with an initial \$34.8 million in funding and then utilizing cost savings from energy, carbon tax, and select capital projects to fund the balance of the program in later years.

Council endorsed the Zero Carbon Whitby Costing Study in September 2022.

Establishment of the 2023 Carbon Budget

With Council's endorsement of the Zero Carbon Whitby Costing Study, in the Fall of 2022 the carbon budget process and the list of Zero Carbon Projects for 2023 were integrated into the 2023 capital budget planning process (Figure 16). This will ensure that the Zero Carbon Whitby Framework has been embedded within the municipal fiscal budget process and help with the ongoing implementation and monitoring of the Town's actions, in alignment with emission reduction targets. The analysis also identifies the

incremental capital costs and operating savings to enable the Town to integrate its first carbon budget as part of the 2023 budget process.

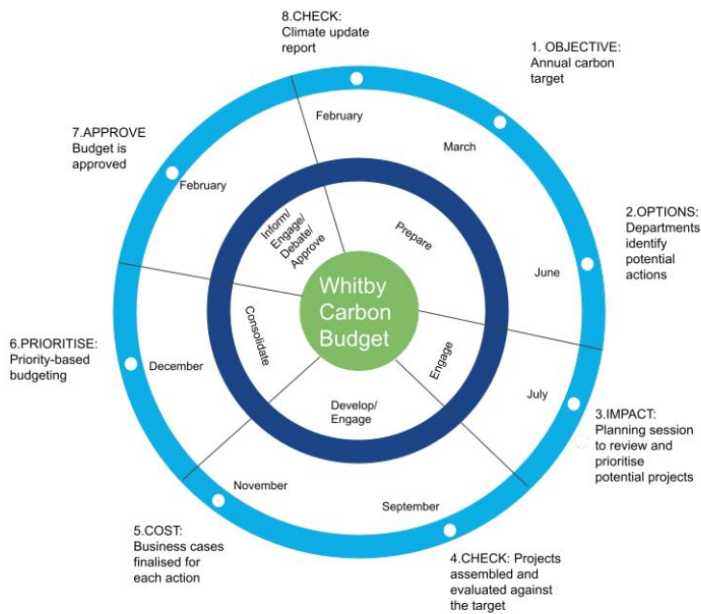


Figure 16 own of Whitby Budget Cycle Incorporating the Carbon Budget

Zero Carbon Revolving Fund

In support of the recommendations of the Zero Carbon Costing Study, a Zero Carbon Revolving Reserve Fund was established in September 2022 to facilitate the implementation of the zero carbon projects. The Zero Carbon Revolving Reserve Fund will provide a sustainable fund to help pay for zero carbon retrofits, pilot projects and to fund incremental retrofit project costs of zero carbon options.

Corporate Building Policy

To minimize the impact that the Town’s growth has on carbon emissions, Council endorsed a new Corporate Building Policy in 2021 that requires all new Town buildings and major retrofits to achieve Tier 3 of the Whitby Green Standard. Tier 3 of the standard would require new facilities to be designed to be net-zero ready or equivalent. This means that if zero carbon emissions cannot be met at the time of opening, they are designed to allow them to be retrofitted in the future; therefore, ensuring the long-term carbon reduction goals can be achieved. In alignment with this policy, in 2022 the Whitby Sports Complex was designed to achieve Tier 3 of the Whitby Green Standard. Achieving Tier 3 will allow the Town to lead by example and will hopefully encourage private developers to also achieve the higher voluntary performance tiers of the Whitby Green Standard.

Global Covenant of Mayors

The Town joined the Global Covenant of Mayors (GCoM) in 2019. GCoM is a global network of more than 10,000 cities spanning 139 countries worldwide. These local governments all recognize that ambitious climate initiatives in their communities need to

be taken to keep global temperatures from rising more than 1.5°C. Whitby's participation in the Global Covenant of Mayors commits the community and Town to the following milestones:

- Develop a GHG emissions inventory;
- Assess climate risks and vulnerabilities of your city;
- Define ambitious climate mitigation, resilience and energy targets; and
- Create prioritize, complete and monitor climate action plans.

For more information about the Global Covenant of Mayors, please visit globalcovenantofmayors.org.

Energy Sub Metering (\$)

In 2022, the Town installed energy sub-meters at Town Hall. These meters provide real-time monitoring of gas, electricity and water equipment at the panel and building level. The installation of these sub-meters will help track and monitor Zero Carbon Whitby initiatives.

Facility Upgrades

In 2022, several energy efficiency upgrades were scheduled to be completed, including:

- Port Whitby Marina LED lighting conversion
- Firehall Headquarters LED lighting conversion
- Operations Centre Vehicle Bays LED lighting conversion
- Iroquois Park Sports Complex Pad 2 and Pad 5 LED lighting conversion
- Civic Recreation Complex
 - Variable frequency drive systems on wading pool and heating pumps
 - Rooftop HVAC system equipment efficiency upgrade
 - LED lighting conversion

Energy Star Portfolio Manager



In 2022, the Town completed the Energy Star Portfolio Manager for all major Town facilities. Energy Star Portfolio Manager is an interactive resource management tool that benchmarks the energy use of any building that allows you to:

- Identify underperforming buildings to target for efficiency improvements;
- Identify best practices from efficient buildings;
- Set investment priorities;
- Verify savings and prevent snapback;
- Share and report performance;
- Earn recognition; and,
- Benchmark and track water use, waste and materials, and GHG emissions.

2023 Initiatives

Community

Whitby Climate Emergency Response Plan

A Mitigation Plan is being developed as Phase 2 of the Climate Emergency Response Plan and will outline how as a community; Whitby will reduce its GHG emissions to meet net-zero by 2045. The Mitigation Plan will identify the sources of GHG emissions and implementation pathways to reduce emissions in Whitby and will align with Durham Region's Community Energy Plan. Phase 2 will be completed in October 2023.

Durham Region Green Development Incentive Program

During the process of developing the Whitby Green Standard, some members of the building industry raised concerns about increased housing costs associated with the advanced sustainability criteria, as well as potential challenges for capacity and availability of skilled trades, in terms of technology availability and reliability. In order to address these concerns, an Incentive Program in partnership with Durham Region, the City of Pickering, and the Town of Ajax is being developed to foster greater uptake of the advanced sustainability design criteria identified in Tiers 2-4 of the Whitby Green Standard.

Whitby Green Standard Demonstration Project (\$)

The Town is working with partners to complete a Demonstration Project that measures the costs and benefits of integrating advanced sustainability criteria outlined in the Whitby Green Standard. This will include monitoring the design, construction and occupancy stages to develop 3-6 low-rise residential homes. The outcomes of this project will be used to inform an incentive program that can be applied to promote advanced environmental performance in new home development.

Updating the Whitby Green Standard to Version 2

In Fall of 2023, the Town will begin the process of developing Version 2 of the Whitby Green Standard, in which Tier 2 will be the mandatory requirement. Version 2 of the Whitby Green Standard is to be implemented in September 2024.

Town-wide District Energy Assessment

To support the uptake of clean energy technology in new development and re-development, the Town will complete a comprehensive District Energy Assessment to identify opportunities where decentralized and clean energy could be generated.

Corporate

Submeters at Iroquois Park Sports Complex

The Town has initiated a project to install energy sub-metres at Iroquois Park Sports Complex. The sub-meters will provide real-time monitoring of gas, electricity and water equipment at the panel and building level and an in-depth overview of energy consumption in the facility. The installation of these sub-meters will help track and monitor Zero Carbon Whitby initiatives.

Zero Carbon Capital Projects

In 2023, several energy efficiency upgrades and design/feasibility studies are scheduled to be completed as listed in the 2023 Budget Book, including:

- Design/Feasibility Study for HVAC replacement with zero carbon measures
 - Iroquois Park Sports Complex
 - Firehall 5
 - Port Whitby Marina
 - Firehall 4
- Design/Structural Analysis for Solar Photovoltaic Installation
 - Firehall 5
 - Town Hall

Through Council's approval of a one time Zero Carbon Whitby Funding Request of \$721,000, which was included in the 2023 budget as a decision item, additional Zero Carbon Capital Projects will be completed. These projects will result in a total estimated GHG emissions savings 165,373 KgCO₂e. Completion of these projects are necessary to keep the Town on track to achieve 20 percent GHG emissions reduction by 2025.

Implementation of the 2023 Carbon Budget

The Zero Carbon Whitby Plan indicates Whitby's 2019 (baseline) GHG emissions were 5,525 tCO₂e. Accordingly, Whitby's interim GHG reduction goal is 1,105 tCO₂e (or 1,105,000 KgCO₂e) by 2025. The 2023 Capital Budget process will be used to track Whitby's progress in achieving this interim goal.

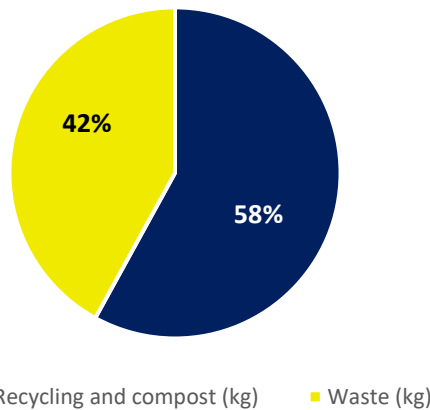
Appendix A: Funding

Sustainability Action	Funding Source	Year Applied	Amount Requested/Received	Success
Whitby Green Standard Demonstration Project	The Atmospheric Fund	2021	\$250,000	Yes
Installation of EV Charging Stations	Natural Resources Canada- Zero Emission Vehicle Infrastructure Program, Round 3.	2021	\$150,000	TBD
	Natural Resources Canada- Zero Emission Vehicle Infrastructure Program, Round 4.	2022	\$350,000	TBD
Native Plant Habitat Improvement	Pollinator Partnership - Native Plant Habitat Grant	2022	\$2,000	Yes
Installation of Sub-meters at Town Hall	Federation of Canadian Municipalities (FCM): Green Municipal Fund - Community Buildings Retrofit Initiative	2022	\$25,000	TBD
Zero Carbon Whitby Costing Study	Federation of Canadian Municipalities (FCM): Green Municipal Fund - Community Buildings Retrofit Initiative	2022	\$128,000	TBD
Operation of Existing EV Charging Stations	Elexicon Energy Sponsorship	2023	\$10,000	Yes
LEAF Community Backyard Tree Planting Program	Elexicon Energy Sponsorship	2022	\$5,000	Yes
Urban Rooftop Beehive Program	Elexicon Energy Sponsorship	2022	\$5,000	Yes
		2023	\$5,000	Yes

(Including Alveole Beekeepers Presentation)				
Whitby Sports Complex	Infrastructure Canada-Green and Inclusive Community Building Fund	2023	\$25 million	TBD

Appendix B - Residential Waste Diversion Rates

2021 Residential Curbside Diversion Rates



2014-2021 Residential Curbside Diversion Rates

Year	Total Waste Generated	Total Waste Diverted	Curbside Diversion
2014	44,610	27,854	62%
2015	40,551	23,919	59%
2016	39,398	22,915	58%
2017	39,124	22,639	58%
2018	38,247	21,740	57%
2019	37,674	21,372	57%
2020	41,489	23,894	58%
2021	41,312	23,798	58%

Appendix C - Greenhouse Gas & Energy Consumption

Town of Whitby Buildings

Corporate Buildings - Energy Consumption*

Energy Type	ekWh 2012	ekWh 2020	ekWh 2021	Difference between 2020 and 2021	% Difference between 2020 and 2021
Electricity	15,518,808	9,366,953	10,239,435	872,482	9%
Natural Gas	13,581,738	14,150,057	12,980,274	-1,169,784	-8%
Total	29,100,546	23,517,010	23,219,709	-297,302	-1%

Corporate Buildings - Greenhouse Gas (GHG) Emissions*

GHG (tCO ₂ e) 2012	GHG (tCO ₂ e) 2020	GHG (tCO ₂ e) 2021	Change 2020-2021	% Change 2020-2021	Change 2012-2021	% Change 2012-2021
3,921	2,837	2,571	-266 tCO ₂ e	-9%	-1,350 tCO ₂ e	-34%

*Please note that much of the energy and emissions saved in 2020 & 2021 were as a result of COVID-19 facility closures.

2021 Corporate Waste

Waste Generated (ton)	Recycling (ton)	Organic Waste (ton)	Diversion Rate (%)	GHG (tCO ₂ e) 2021
277	41	9.2	15%	133 tCO ₂

Corporate Fleet GHG emissions

GHG (tCO₂) 2017	Diesel (l)	Gasoline (l)	GHG (tCO₂) 2021	Diesel (l)	Gasoline (l)	Change 2017- 2021	% Change 2017- 2021
1,956	493,997	259,659	1,749	458,618	222,418	- 207 tCO ₂ e	- 10.6%