



Climate Change Initiatives Update 2022-2023

Environmental Advisory
Committee Meeting

Monday, May 15, 2023
7:00pm

Engineering & Capital
Delivery Division

Pre-2019

- 2012: Establishment of the Green Initiatives Reserve Fund
- 2013: The Economic Value of Natural Capital Assets
- 2014: Installation of solar PV panels at Public Library and Town Hall
- 2016: ToA joins the Blue Dot Movement
Installation of solar PV panels at the SARC
- 2017: Installation of solar PV panels at the JOC
- 2018: Development of the Corporate Environmental Action Plan (CEAP)
ToA joins the Partners for Climate Protection (PCP)



2019

- 2019: Declaration of Climate Emergency

Post-2019

- 2020: Establishment of the Anti-Idling Policy
- 2021: Development of the Green Fleet Action Plan (GFAP)
Development of the Community Energy Plan (CEP)
Environmental Stewardship Program: GO Green Challenge
Establishment of the Electric Vehicle Charging Station Policy
Installation of EV charging stations across Town-owned facilities
- 2022: Development of the Climate Change Adaptation Plan (CCAP)
Town Hall awarded Top Ranked Building in ClimateWise Challenge

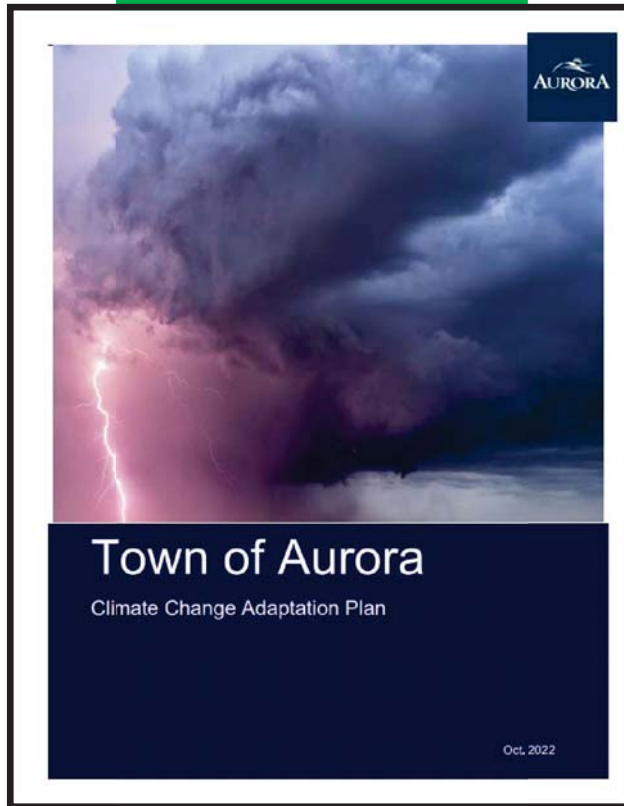


Town of Aurora Highlights over Last Decade

ToA Climate Initiative Highlights 2022



Council Endorsement of the Climate Change Adaptation Plan



Plan Overview

- The Climate Change Adaptation Plan (CCAP) was undertaken back in 2021-2022 and consisted of a climate change vulnerability and risk assessment to four (4) Town-owned asset category types including, linear infrastructure (roads, stormwater), water infrastructure, parks and natural heritage, and facilities.

Purpose of Plan

- The purpose of the CCAP was to assess the level of risk/vulnerability that was associated to each of the four Town-owned asset categories, based on projected climate change analytics.

Objective of Plan

- The objective of the CCAP was to develop an implementation plan, or a series of recommended climate action items, to address the vulnerabilities presented in the risk assessment and to strengthen the longevity and integrity of Town-owned assets.

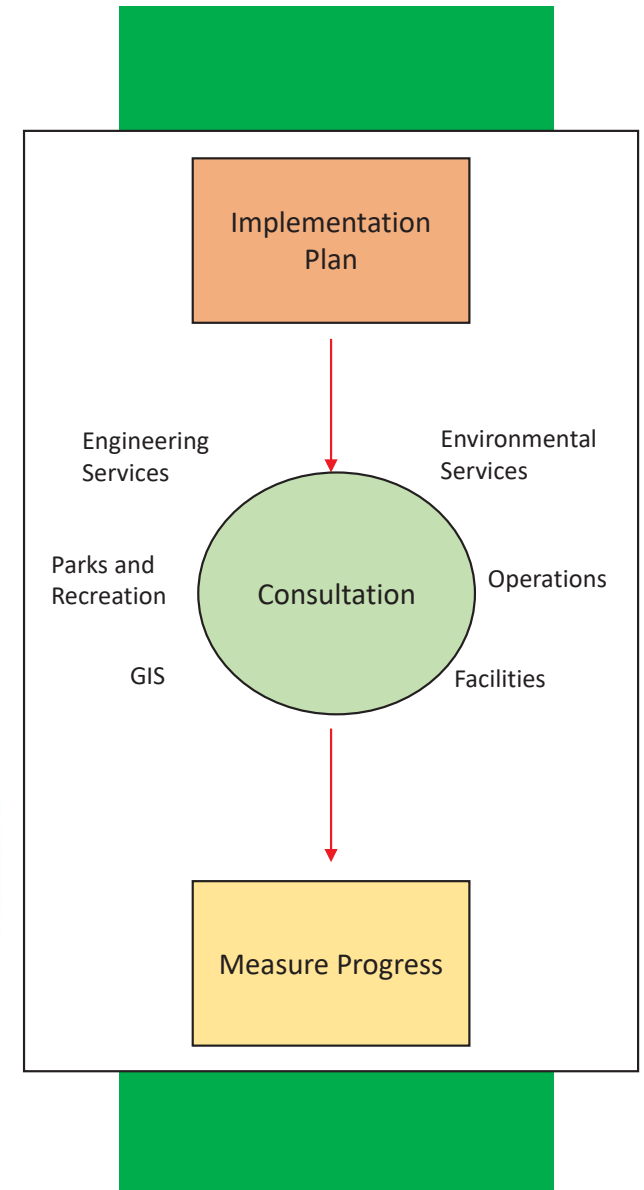
Plan Completion

- The Consultant completed the plan at the end of Q3 and presented to Council in Q4 of 2022.

Plan Follow-Up Initiatives

- Energy & Climate Change Analyst to review the Implementation Plan included in the CCAP
- Consultation with all relevant department leads to assess what initiatives from the Implementation Plan has been completed, in progress, or not yet completed.
- Documentation of progress made to the Implementation Plan; this will involve annual outreach efforts to relevant department leads on projects

Link to CCAP Report: [Town of Aurora.pdf](#)



Corporate Environmental Action Plan Progress Report 2022



Plan Overview

- The Corporate Environmental Action Plan (CEAP) is a five-year plan that allows the Town to meet its environmental goals.

Purpose of Plan

- The plan serves to protect and enhance the natural environment, promote environmental sustainability, integrity, and conservation of resources, and creates a practice of environmental stewardship within the community.

Plan Deliverable

- A progress report is submitted and presented to both EAC and Council on an annual basis to present a high-level overview of the environmental accomplishments that have been completed over the previous year.

Progress Report 2021 Completion

- At the start of Q4 of last year, the 2021 Progress Report was submitted to Council for review.

Link to 2021 Report: [Corporate-Environmental-Action-Plan-2021---Progress-Report.pdf \(aurora.ca\)](https://www.aurora.ca/Corporate-Environmental-Action-Plan-2021---Progress-Report.pdf)

CEAP Themes



Water
Conservation



Sustainable
Urban
Development



Waste
Reduction
and Diversion



Biodiversity
and Natural
Heritage



Climate
Change and
Energy



Environmental
Awareness

Successfully Implemented CEAP Objectives Summary: 2021



In 2021, Town Council approved the **Electric Vehicle Charging Station Policy**, taking another important step towards decreasing the community's GHG emissions through the transition towards an electric-fuel exclusive corporate transportation fleet.

Town Operations changed **315 water meters** in 2021 as part of its water loss reduction strategy.



Applied **low impact development techniques** during construction of the 2021 road reconstruction projects (Bioswales and enhanced oil/grit separators)

Council approved the **Bag Tag Program**, which aims to educate residents on proper waste disposal practices and increase town-wide waste diversion rates.



The Town **diverted approximately 66% of its waste**; exceeding the 2018 base year rate by 1%.

Planted **1,900** trees and shrubs on Aurora lands.



Partnership with Herb McKenzie Park, thirteenth partnership, was established in 2021 with the Adopt-a-Park Program and Partnership development.

Successfully Implemented CEAP Objectives Summary: 2021

The Town had **partnered with IVY Charge and installed eight (8) Dual Head Level 2 Chargers at Town-owned facilities**; with proposed actions on installing two (2) additional chargers as part of the Library Square Project.



Continued energy tracking at Town-owned facilities demonstrated **14.5% less energy consumption** compared to 2018 metrics.

Developed an enhanced Lymantria Dispar Dispar (LDD) strategy.



Generated **613, 727 kWh of electricity** from Town solar rooftop systems.



Integration of the Town's Anti-Idling campaign in **Every Second Counts** as well as **two (2) GO Green Challenges**.



Integration of operational changes at Town-owned facilities, in effort to reduce energy consumption, resulting to a **23% energy avoidance** in 2021.



The Introduction of the Town's Green Development Standards

What are Green Development Standards?

- Green Development Standards (G.D.S) are voluntary or mandatory measures developed by municipalities to encourage developers and builders to create thoughtful and innovative developments using sustainable design, which considers the principles of economic, social, and ecological sustainability.
- The GDS sets expectations for high-performance buildings, community connectivity, and promotes access to low or zero carbon options through a series of requirements related to energy, ecology, water, complete communities and building materials, and waste diversion.

Release Date of Phase 1 GDS: July 2022

Additional Information on Town of Aurora's GDS

[Green Development Standards Handbook - Town of Aurora](#)

[Green Development Standards Application Assessment - Town of Aurora](#)

[Aurora's Green Development Standards - Town of Aurora](#)



Environmental Stewardship Programs



GO Green Challenge 2022

- The Town held its second annual community GO Green Challenge in July of last year implementing a Superhero themed event.
- The Community GO Green Challenge is a month-long event that encourages individuals, families, schools, organizations, and businesses to challenge themselves to reduce their environmental footprint.
- Participation rates in 2022 exceeded that of 2021 by **~2.6%**.
- Submissions of climate action activities, by participants, in 2022 exceeded that of 2021 by **72.5%**
- Check out some pictures on the next slide.



Environmental Stewardship Programs

Anti-Idling Campaign 2022

- The Town's Energy & Climate Change Analyst worked in collaboration with the Communications team to release a series of media posts on the importance of reducing unnecessary vehicle idling practices in Q4 of 2022, in support of the Town's Anti-Idling Policy.

Just 10 seconds of idling uses more fuel than restarting your engine.

DON'T SIT IDLE. EVERY SECOND COUNTS.

aurora.ca/IdleFreeAurora

In support of Aurora's commitment to the health and safety of its residents and businesses, Aurora has passed an anti-idling policy.

This means motorists in Aurora must turn their cars off after five consecutive minutes but are encouraged to turn off after 30 seconds.

The policy makes exceptions for extreme weather conditions, as well as mobile workshops where the vehicle motor powers work-related equipment.

Please visit aurora.ca to view the policy information and a full list of exemptions.

Report Excessive Idling

Call the Bylaw Services Department at 905-727-2122 ext. 4240 or email bldepartment@aurora.ca Monday to Friday between 8:30 a.m. and 4:30 p.m.

Please note that for any unnecessary idling, officers need to observe the idling for five minutes.

For more information, visit: aurora.ca/idlefreeaurora

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IDLE FREE AURORA

Every second counts.

TURNING OFF YOUR ENGINE

Makes You Smarter & Healthier

Breathing exhaust fumes can damage brain cells and is linked to asthma and other health conditions. Kids are especially vulnerable because they inhale more air per pound of body weight, and lots of idling happens near schools. Studies have even shown that kids with a high exposure to exhaust fumes had lower IQs by age 5.

Makes You Richer

An idling engine uses twice as much fuel as a moving vehicle and costs hundreds of dollars a year. Idling also increases your maintenance costs and can even damage engine components. Since your engine is not operating at its peak temperature when you idle, the fuel doesn't combust completely, leaving residue behind that can ultimately damage your exhaust system.

Helps Save Our Planet

Greenhouse gas emissions from vehicles account for 21% of Aurora's community emissions. For every 10 minutes of idling you cut from your life, you'll save one pound of carbon dioxide -- a harmful greenhouse gas and major contributor to climate change -- from being released into the atmosphere.

Did you know?

If all Canadian drivers avoided unnecessary idling for three minutes a day, we would save a combined \$630 million per year. This is the equivalent of taking 320,000 cars off of the road for the entire year.

Your actions can make a difference, not only for the environment but for your health, intelligence and pocketbook, too!

EVERY SECOND COUNTS

Most people idle for convenience and comfort. We site during drop-offs and pick-ups, running errands, sitting in drive-thrus, warming up or cooling down the car, waiting at railway crossings and when parking where we shouldn't.

5 EASY TIPS TO REDUCE IDLING

Turn off your engine after 10 seconds. Yes, just 10 seconds of idling uses more fuel than restarting your car!

Warm up your engine by driving. Even in cold weather, the safest and most effective way to warm a car engine and cabin is to drive it for 15-20 minutes. Most car engines only need 15 to 30 seconds of idling before being driven.

Buckle up. Jump in the car prepared with warm hats and gloves for you and your kids. Don't idle your car for warmth.

Minimize the use of remote car starters. Remote car starters may seem like a luxury, but they come with a price to your health, your wallet and the environment.

Be smart. Keep your car cool by parking in the shade or using a sun shade. This location cover that is placed on your dashboard will help prevent those hot summer days from heating up your car when you return.

Lead by Example

Turning off the car sets a good example for your kids and other passengers, and gives a chance for you to educate them about the dangers of idling.

Spread the Word

There are many misconceptions around idling. Help spread the word and share this information with a friend. Tell everyone you know how easy it is to make every second count.

For free resources and downloadable sheets for residents, schools and businesses, please visit aurora.ca/idlefreeaurora.

ClimateWise Building Challenge 2022



What is the ClimateWise Building Challenge?

- This friendly competitive amongst other York Region municipalities and local businesses supports the implementation of the Town's corporate energy plan and its commitment to reduce greenhouse gas emissions by 80% by 2050 from 2018 levels. 60 municipal buildings and 15 commercial buildings have joined this friendly award and recognition competition.
- The ClimateWise Building Challenge is a York Region wide, friendly awards and recognition competition created to reduce greenhouse gas emissions and improve building energy efficiency through collaboration, education, and innovation.

Most Efficient (Top Ranked) Town-Owned Building of 2022

- Awarded to Town Hall



Environmental Stewardship Programs



Second Annual EV Showcase Event 2023

What is the EV Showcase?

- The Town held its Second Annual EV Showcase event at the Stronach Aurora Recreation Complex (SARC) in 2023. The goal of the EV Showcase is to provide an opportunity for residents to learn more about electric vehicles and the many benefits that they offer. The event supports the strategies included in the Town's CEP and Strategic Plan on building initiatives to improve transportation, mobility, and connectivity within the Town.
- **Date and Time of Event:** May 7th 2023 from 10AM-4PM
- **Location:** Stronach Aurora Recreation Complex (SARC) 1400 Wellington St E, Aurora, ON L4G 7B6

Event Partners



Event Attractions

Take a spin around the micro mobility car test track

Test your driving skills on an outdoor micro-mobility test track with the SARIT micro-mobility cars. SARIT (Safe Affordable Reliable Innovative Transport) is a three -wheel vehicle measuring 3½ feet wide (1 metre), 7¼ feet long (2.2 metres) and 5.5 feet high (1.6 metres) and is the latest innovation from Magna founder Frank Stronach.

Take a Walk-Through of the York Region's eBus

Take a free test drive

Test Drive some of the latest EV models (free) with Plug N'Drive. There is no registration required. Simply join us on the day of!

Guest Speaker from the EV Society

Guest Speaker: Tim Burrows, Electric Vehicle Society
10:30 a.m., Inside the SARC (meeting room beside pool viewing area)

Speak with local EV owners

Members of the Electric Vehicle Society, as well as other local EV owners will also be on hand to show their EVs, answer your questions and help clear the air on any hesitations you have around driving electric, like range anxiety, battery life, hauling capacity, maintenance costs and everyday use.



Event Sponsors



ToA Climate Initiatives In Development 2023



The Renewal of the Town's Energy Conservation and Demand Management Plan 2024-2029

What is the Energy Conservation and Demand Management Plan?

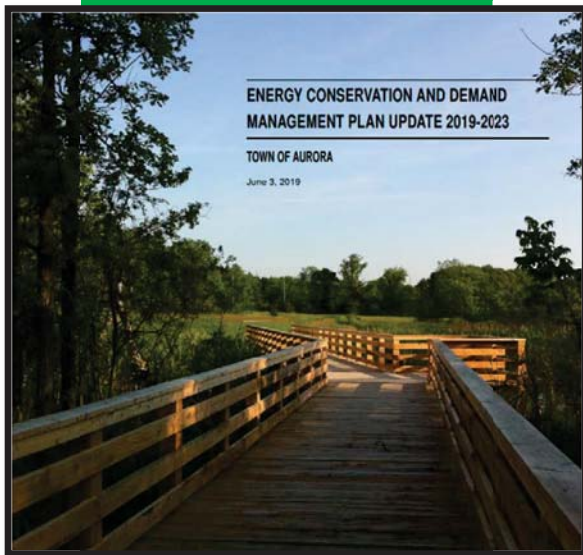
- The ECDMP was created in accordance with the requirements described in Ontario Regulation 25/23 under the Electricity Act. The plan provides a roadmap for energy management over a 5-year period.

When was the Town's last plan?

- The last plan was conducted in 2019.

When will the next plan be developed?

- The Town will be developing its next 5-year renewal ECDMP 2024-2029 this year that will include, but not limited to, the highlight of the following objectives:
 - Examining historical energy consumption and GHG emissions, as well as energy conservation measures (ECMs) that have been implemented since the 2019 ECDMP;
 - Examining whether the goals of the 2019 ECDMP have been met, and sets goals for the 2024 ECDMP to be met by 2029; and
 - Examining what ECMs are already planned, as well as additional ECMs which should be completed from 2024-2028 in order for the Town of Aurora to meet the goals established within the renewal plan.



Environmental Stewardship Programs

Phone Recycling Program

The development of a new recycling program is under development for the Town. With an anticipated launch date in May 2023, this new program provides an opportunity for the community to drop-off their unused technological devices at one of two drop-off locations. The purpose of this program is to reduce the amount of e-waste that is being sent to landfills and ultimately increase diversion rates. The Town is working in collaboration with Greentec on this initiative and additional information will become available once the final details of program design have been completed.

Program Release: Earth Month 2023

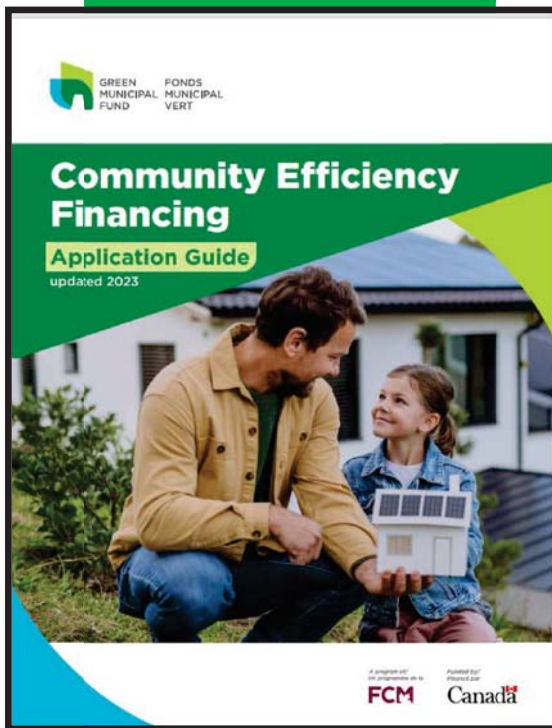
GO Green Challenge 2023

In 2023 there are two (2) GO Green Challenges scheduled for July and November for the community and Town Staff respectively.

Anti-Idling Campaign 2023

The Energy & Climate Change Analyst will be working with the Communications team in the upcoming months for the development of the Town's 2023 educational campaign involving the promotion of anti-idling practices and the Anti-Idling Policy.

Community Efficiency Financing Application Submission to The Green Municipal Fund



What is Community Efficiency Financing?

- CEF is about creating a new financial offering and services to help more homeowners upgrade the energy performance of their homes, through energy-efficiency measures, renewable energy installations, or both.

What is the Community Efficiency Financing Grant?

- The grant is a \$300 million initiative, offered through the Green Municipal Fund, that helps municipalities deliver energy financing programs for low-rise residential properties.

Funding for a Feasibility Study: 2023 Capital Project

- The Town, in Q3 of 2022, reached out to the Federation of Canadian Municipalities (FCM) with interest in the application for a Community Efficiency Financing grant.
- The Town has submitted both its initial proposal and full application to the Green Municipal Fund and currently working on the Terms of Reference for a Request for Proposal on the development of a Feasibility Study.

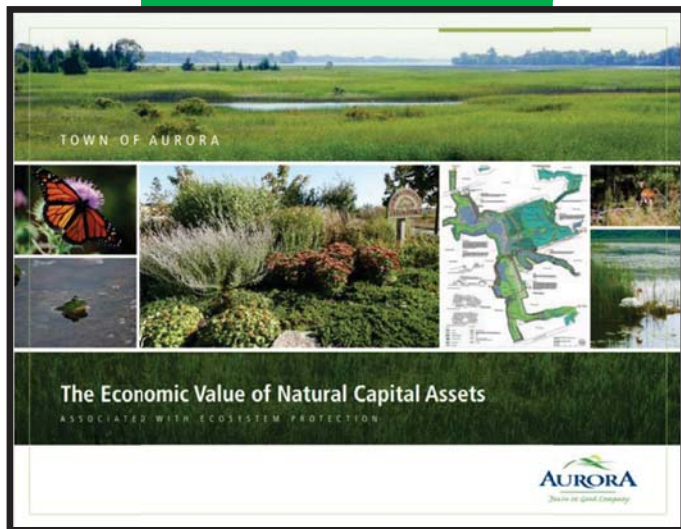
Update to the 2013 Economic Value of Natural Capital Assets

Project Background

- In 2013, the Town made an important assessment that estimated an initial baseline of the benefits provided to residents of Aurora from the existing stock of natural capital in the Town through the Economic Value of Natural Capital Assets.
- As per the Implementation Plan included in the Town's CCAP, one of the climate action recommendations suggested by the Consultant was to update the 2013 Economic Value of Natural Capital Assets plan.

Project Status

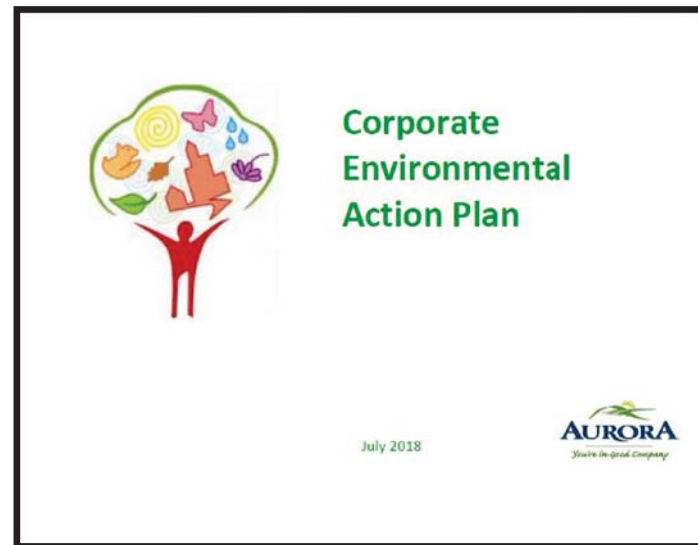
- In 2023, Council approved for the internal funding of an update Natural Capital Asset Management Plan. An update to the baseline 2013 analysis will allow the Town to assess economic costs associated with the changes to the features related to natural capital, which can be factored into future land use decisions and other Town initiatives. The Town is currently working on the Terms of Reference for a Request for Proposal on the development of an updated Natural Capital Asset Management Plan.



Corporate Environmental Action Plan: 2022 Progress Report

2022 Progress Report

- This year the Town will be releasing it's 2022 Progress Report that will provide an overview of the environmental accomplishments that were done last year.
- The Progress Report will be presented in the next EAC meeting.



Thank you!

