

Introduction



It's been a momentous few months since our last HalifACT community update. Notably, the federal government has allocated funding to support much-needed deep energy retrofits in the Halifax region. As part of the Canada Greener Affordable Housing Program and the Affordable Housing Fund, around \$12 million will go toward boosting the efficiency and resiliency of around 500 multi-unit residential buildings in the Halifax Regional Municipality.

In other clean energy news, the <u>provincial government</u> of Nova Scotia directed \$100,000 in funding to Akoma Holdings, a major hub for Black businesses in the municipality and the largest Black-owned property holding in Canada. This funding will support affordability and sustainability initiatives at Akoma.

The municipality has been awarded an A grade by CDP, formerly known as the Carbon Disclosure Project. Being on CDP's 2924 Cities A List is a significant achievement, as only eight municipalities in Canada earned CDP's top score. While the global average was a B, our region's A rating reflects the highest standard of local climate leadership and is the direct result of the diligent work done by our Environment & Climate Change team and the many partners in our HalifACT network. HalifACT achieved this grade by scoring highly in key CDP criteria, like setting emissions reduction targets, managing our supply chain, incentivizing climate action and aiming for maximum transparency in public reporting.



Taking our environmental impact into account isn't just the right thing to do; it's also proving to be the fiscally responsible approach. That's why HalifACT's Clean Energy team is focused on demonstrating how energy efficiency drives investment, improves affordability and strengthens resilience, all while advancing our climate goals. Their deep energy retrofit pilot projects, delivered in partnership with Thinkwell Shift and EfficiencyOne, and highlighted in this update, are charting a course that brings these priorities together.



One of the pillars of our municipal economy is tourism. As we move into the summer months, people will be traveling across Canada to experience the array of cultures, histories and environments that the country can offer.

For over a century, Nova Scotia has been called "Canada's ocean playground" because it is bordered by four incredible bodies of water: the Gulf of Saint Lawrence, the Gulf of Maine, the Bay of Fundy and the Atlantic Ocean. That's an extraordinary 7,500 km of shoreline. We want to make sure that travelers consider their impact on the local environment, so we're excited to see that <u>Discover Halifax</u> is helping keep our ocean playground a healthy, prosperous place by giving folks information on how to travel sustainably, including when they're biking and hiking along our scenic shorelines.



JustFOOD is taking action on food insecurity



The municipal team supporting the <u>JustFOOD</u> initiative is working closely with the HalifACT team to ensure that people in the municipality are able to enjoy a healthy, just and sustainable food system. The program has just received a boost from the provincial government, with \$90,000 in funding allotted to learn how we can expand the program and meet the needs of more residents.

The primary goal of JustFOOD, protecting folks in the region from food insecurity, is becoming more important as Canada's trade war with the United States increases the cost of food. It is especially important that residents are able to access healthy food during emergencies, when accessing food can be challenging, so JustFOOD is creating an off-grid cold storage system to preserve perishable food in the event of a power outage.

JustFOOD is also using provincial funding to collaborate with the Halifax Refugee Clinic, the Centre for Migrant Worker Rights NS and several international student centres in the region to create emergency storm kits to address food insecurity. These collections of local, shelf-stable, high-protein foods will help sustain vulnerable communities for 72 hours in a crisis situation.



One especially impactful part of the JustFOOD Action Plan is vermicomposting. Using worms to repurpose food waste as fertilizer diverts a lot of solid waste. With self-contained worm bins, you can create compost for planting even if you can't keep an outdoor compost pile. It's a small act that lets us act on climate as a community.

Mapping out urban heat islands

We're partnering with <u>Evergreen</u>, a non-profit that designs healthier public spaces, to understand Urban Heat Islands (UHI) in the municipality. UHI are areas that are far warmer than surrounding areas due to urbanization and a lack of green space. Our collaboration with Evergreen uses data visualization and analytics that will let us see the present and future impacts of urban heat islands, supporting more informed decision-making and policy changes at the local level. This way of adapting to extreme heat will be vital for making the municipality a safer, more equitable place to live.



Health Canada is helping Nova Scotia Health assess the risks and vulnerabilities that Nova Scotians now face as a result of climate change. HalifACT will be consulting with Nova Scotia Health as they look at the local health impacts of this global emergency through their HealthADAPT program.

Retrofitting for more resilient homes

The HalifACT team, along with our partners at Clean Foundation, piloted a successful Resilient Home Retrofit program. Twenty flood risk and energy assessments were conducted, leading to resilient retrofits for nine homes.

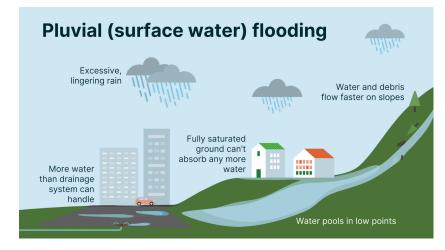
Based on the assessments and resiliency upgrade best practices, sump pumps, rain gardens, French drains and other features were installed inside and outside each home to increase their ability to withstand and recover from weather events and climate-related emergencies.

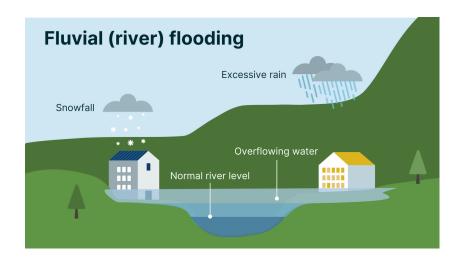
Along with improved peace-of-mind, homeowners participating in the program improved their knowledge and ability to prepare their homes for future extreme weather events and disruptions connected to climate change.

Flood mapping web page is now live

The municipality is mapping out flood hazards in the region, with one of the most comprehensive publicly available flood resources currently available in Canada. This flood mapping covers around 10,000 km of water courses and over 300 km of coastline. In addition to mapping the entire municipality to gain an understanding of our most flood-prone areas, we are also sharing detailed interactive flood maps for the Sackville and Little Sackville River Floodplain and the Shubenacadie Floodplain.







Collective Impact



Recognizing youth-driven climate innovation

With the help of the <u>Youth Climate Action Fund (YCAF)</u>, we're tackling greenhouse gas emissions and fostering vibrant, resilient communities.

After the successful first round of YCAF, the municipality was awarded another \$140,000 CAD from Bloomberg Philanthropies and United Cities and Local Governments to support more youth-led climate initiatives. And by working with the Halifax Climate Investment, Innovation and Impact Fund (HCi3), we were able to award 18 exciting projects with financial support.



Youth Climate Action Fund (YCAF) Winner Round 2

Period Equity Alliance Society: Youth-Led Climate Action for Sustainable Menstruation

Aruna Revolution

My Climate and Art: A training workshop for young artists

Banye Art

BLM in this Together

Emerge - Environmental Catalysts Emerging Above the Underpinning

Land Stewardship training

Dalhousie Outdoors Society

The Deanery Project

CycleScapes: Art, Advocacy, & the Road Ahead on the Eastern Shore

EAC Teens

Ecology Action Centre

Food Desert/Marginalized Communities Initiative

Enactus

Environmental Education and Sustainable Solutions: A Youth-Based Workshop Series

Friends for the Future

The Fresh Ingredient

Garden Goobers (Marine Drive School)

Science Fair

Hope Blooms

Turning the (Green) Tide: Micro and Macroalgae as Sources of Renewable

Energy

Hydrostone Academy

HalifACT Acting on Climate Together





Turning the (Green) Tide: Micro and Macroalgae as Sources of Renewable Energy Hydrostone Academy

Loaded Ladle

Beet Street Market

Power up - Sustainable urban garden for art and community

MacPhee Centre

SmartBin AI: Waste Classification System

NSCC Green Al Innovators

Fairview Elementary School Pollinator Classroom Project

Oakhill Outdoor

Our Garden, Our Gallery

Rotaract Club of Halifax

Square Roots

Square Roots North End

Decade to Destiny: Voices of African International Students on Climate and Culture

Welcoming Intercultural Newcomers Association

Reimagine, Repurpose, Restore

Women in STEM



Climate training for community mobilization

One of the most important things the HalifACT plan does is make sure we're all on the same page when it comes to climate action. To help achieve this in our municipal work, Environment & Climate Change led a training session with members of our Community Mobilization Teams (CMTs) that focused on how to respond to climate-related events like extreme heat.

HalifACT at North Preston community day

Folks from the HalifACT team had the opportunity to attend North Preston Community Day on March 20, organized by the North Preston Community Centre.

The event featured presentations and program updates from Nova Scotia Health, the province's African Nova Scotia Affairs department, members of the municipality's Parks & Recreation team and the RCMP. We had rich conversations with residents about things like emergency preparedness, how to prepare homes for climate hazards and supporting youth-led climate action.



The North Preston Community Centre.

Three new Climate Commitment Badges announced

When HalifACT joined forces with the <u>Ecology Action Centre</u> for the Climate Commitment Badge program, we wanted to create a way for people to feel empowered when they act together on climate. The badges are a reminder that we need to urgently rethink some of our everyday habits, from eating and how we get around, to the energy that heats and cools and lights the places that we call home. Now that they have successfully launched the Climate 101, Getting Around and Home Energy badges, EAC and our Collective Impact team will soon be introducing badges for Climate Leadership, Community Resilience, Nature and Conservation and Food.

Members of the CEO Climate Charter are committed to green growth

The purpose of the CEO Climate Action Charter is to encourage one another to take meaningful climate action, in the spirit of continuous improvement. Organizations that have committed to the charter, like Nova Scotia Power and Dalhousie University, have been meeting to discuss the most effective path to achieving net zero in the municipality. Members of the Charter are currently collaborating on the best way to drive a transition to more sustainable forms of transportation in the region.



Earth Week nature walks

The municipality, Ducks Unlimited, the Ecology Action Centre (EAC), Halifax Field Naturalists and the Nova Scotia Invasive Species Council (NSISC) organized a week of nature walks in celebration of Earth Week. The aim was to encourage residents to take note of how nature changes during the springtime and to get outside to appreciate some fresh air together. On the evening of Earth Day, April 22, members of the ECC team led a large group on a walk along the scenic Salt Marsh Trail, which give folks an opportunity to spot aquatic birds like dabbling and diving ducks.

As much as we rely on the many things we call "nature," occasionally nature needs our help.
Right now, we are facing an invasion of hemlock woolly adelgid (HWA) in the region. This very concerning pest is why the municipality and the Nova Scotia Invasive Species Council (NSISC) recently led residents on a walk-through of Hemlock Ravine Park for signs of HWA.





Eggs from hemlock woolly adelgid collect on a branch.

Getting out in community

The Environment & Climate Change team appreciates any opportunity to go out into community and engage with residents. Over the last few months, ECC staff have attended sustainability fairs at Nova Scotia Community College (NSCC) campuses, gone out to our local farmers markets to spread the word about YCAF, visited WinterFest in Dartmouth to share info about our Climate Commitment Badges Engagements and chatted with residents at many other events around the region.





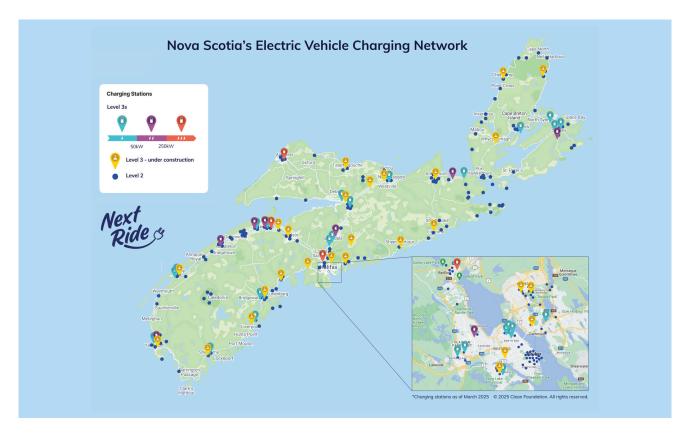
Charging Electric Vehicles (EVs) and easing range anxiety

The municipality is making progress toward installing its EV charging network. Our Clean Energy team has the first Level 3 fast chargers up and running at the Canada Games Centre, the JD Shatford Library and Musquodoboit Harbour Library. These chargers will be a game changer as drivers of electric vehicles look to get a quick charge and keep moving.

Clean Foundation has been our trusty partner in encouraging the adoption of EVs in our municipality. They have put together the <u>EVolved guidebook</u>, an accessible, engaging resource that helps first-time and long-time drivers of EVs understand the ins and outs of owning one.



A Level 3 DC fast charger.



The Ragged Lake photovoltaic solar array is coming online

Solar panels use photovoltaics to make electricity from the sun's photons, creating the cheapest, most abundant source of power on the planet. At the Ragged Lake Transit Centre, we're installing almost a megawatt of solar photovoltaics.

All of this solar energy will be used to charge our brand new electric buses and move us closer to being fully disconnected from fossil fuels at the Transit Centre.





Halifax Transit, with support from HalifACT, officially launched its Zero **Emission Bus Project on** May 20. We're excited to get these first 60 e-buses on the road, and to kick off one of the most ambitious electric transportation initiatives in all of Canada. Soon, residents will be able to ride on one of these ultra-quiet Nova e-buses, knowing that they're contributing to cleaner air and climate action.

Two deep energy retrofit projects completed

Under the HalifACT climate plan, the municipality is committed to a 75 per cent reduction of our operational greenhouse gas emissions by 2030 and net-zero community emissions by 2050. The bulk of greenhouse gas emissions in the Halifax region come from our building stock, so reducing the amount of fossil fuels we burn to manage our buildings is crucial. The biggest impact we can make is by retrofitting the buildings that already exist in the municipality.

The municipality's Clean Energy team has completed two pilot projects to understand the potential of a retrofit program with Thinkwell Shift and EfficiencyOne. In both pilots, the gains of doing a retrofit were clear: increasing efficiency, lowering costs, improving resiliency and reducing the stress of managing a home.



Retrofits boost the overall efficiency of a home and lowers its environmental impact.



Partnering with Toronto Metropolitan University to study the health effects of water quality in the municipality

In 2025, the Halifax Regional Municipality will be one of several municipalities across Canada taking part in a study, led by researchers at Toronto Metropolitan University (TMU), that looks at the impacts of E. coli and blue-green algae toxins on human health. People swimming, boating and walking their dogs in and around the water at Birch Cove Beach (Lake Banook), Kinsmen Beach (First Lake) and Shubie Park (Shubenacadie Canal and Lake Charles) will likely notice members of the research team this summer chatting with folks about how they use the water. After these surveys, ECC will be coordinating with TMU's scientists to see if lake users experienced any adverse health effects after using the water.





A new State of the Lakes report will be released soon to give residents an update on the health of our lakes through the municipality's popular <u>LakeWatchers program.</u>



Yellow floating heart grows in Little Albro Lake.

Containing yellow floating heart

The municipality's Environment team is working with Fisheries and Oceans Canada and the Nova Scotia Department of Inland Fisheries to remove yellow floating heart, an invasive plant, from Little Albro Lake. The 2024 treatment reduced the amount of yellow floating heart in the lake, but we expect more herbicide treatments will be needed. The goal is to fully remove the plant so that it can't spread to other water bodies, where containment could quickly become impossible.

Naturalizing Birch Cove Park

Naturalization is one of the most impactful things we can do to help local ecosystems. Just a little bit of digging and planting can go a long way to preventing flooding and erosion. In 2024, we had so much fun conducting smaller projects at places like Fairview Heights Elementary school, Brookline Drive Park and Woodside Area Park. More small projects are planned for 2025.

One of the largest installations our Environment team has been involved in took place at Birch Cove Beach in 2024. The greenery we planted with members of the community and municipal staff has survived and thrived through the winter. The plants are now starting to grow and bloom, giving Birch Cove Beach a more vibrant and resilient shoreline.



Birch Cove shoreline, where naturalization is taking root.

Free Green Shores training

On March 29 and May 2, the municipality offered free <u>Green Shores</u> Level 1 training to residents, with sessions held in Lower Sackville and Dartmouth. This training is part of ECC and Parks Naturalization's <u>Living Lakeshores project</u>, which aims to restore natural processes in municipally owned lakeshores and encourage communities to capture stormwater and help manage erosion, improving our water quality and limiting flooding in the region.



Kinsmen First Lake Beach Park, where a municipal installation is set to occur.



Green Shores teaches people how to work with nature to build the resilience needed in shoreline systems so that they can withstand the force of water and the impacts of climate change. Green Shores Level 2 training was offered for free to residents from May 29 to 30 at the Sackville Sports Stadium. This two-day course builds on the principles introduced in Level 1 and dives deeper into how the credit-and-ratings system can be applied to individual projects.

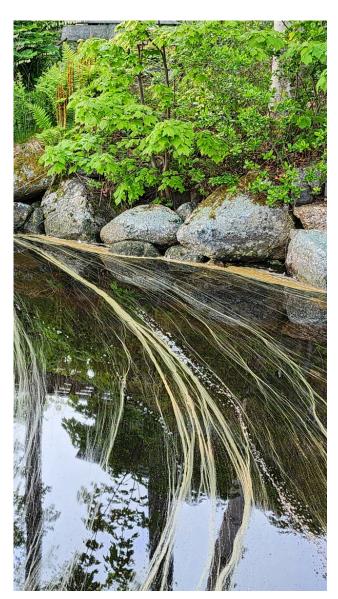
World Water Day community showcase

The Environment team co-hosted our third annual World Water Day event with the Ecology Action Centre. This free event put the spotlight on people working on water-related projects and initiatives across the region. Representatives from ECC and the EAC talked to attendees about how to get involved with the <u>Climate Commitment</u> Badges and showcased water projects from around the region.

Keeping up with blue-green algae

Every year from July 1 – August 31, the municipality supervises 19 beaches to make sure the water is safe for recreation. To help protect the safety of swimmers, members of the Environment team keep track of blue-green algae and levels of bacteria.

Blue-green algae can sometimes be hard to identify, as it'll occasionally look like petroleum or another toxic contaminant has been spilled into the water. If you think you've spotted blue-green algae at a supervised beach, please let us know by calling 311. And if you see what you think is blue-green algae at any other lake in the municipality, you can contact the provincial Environment and Climate Change office in Bedford at 902-424-7773.



Pollen like this can be mistaken for blue-green algae.

Household Special Waste Disposal

If you are looking to dispose of a contaminant like gasoline, you can take it to our <u>Household Special Waste</u> depot, located at 20 Horseshoe Lake Drive in Bayers Lake. Although, for safety purposes, you are only able to drop off contaminants on scheduled Saturdays when trained, certified personnel are there. If you're not sure about how to safely dispose of a substance, you can contact 311 for more information and advice.

Bird Week

Bird Week is an annual celebration hosted by the Bird Friendly Halifax Coalition, which includes Nature Nova Scotia and members of the HalifACT team. Guided bird walks will happen in all 16 districts, giving residents and Councillors a chance to learn about the birds in their communities and how they can help protect them.





Making climate action mainstream

The ECC Governance team has been facilitating collaborative meetings with partners across municipal government—including JustFOOD, Halifax Transit, Diversity & Inclusion and Community Safety. These sessions aim to foster internal climate leadership through the Climate Governance Model, adopted in March 2024. The governance model is designed to hold us responsible for reaching net zero municipal greenhouse gas emissions by 2030. The Governance team guides our many business units through embracing climate action in a way that prioritizes equity, the public good and integrated decision-making.

Empowering staff through training

In addition to building strategic partnerships, the Governance team is ensuring that municipal staff are equipped with the knowledge and support they need to bring a climate-conscious lens to their daily work. In fall 2025, the Governance team will be launching a collection of climate training experiences for municipal staff. By building a culture of shared responsibility and creating a network of climate champions across different departments, HalifACT is helping to foster an organization-wide commitment to climate action. After all, our approximately 3,600 municipal employees aren't just public servants, they're residents and dedicated community members, too.

Working Groups, coordinating our efforts

The HalifACT Working Groups have been important for bringing distinct departments together and creating a shared roadmap for phasing out the use of fossil fuels. The Corporate Fleet Electrification Working Group is helping us transition to electric vehicles by piloting new EVs with Halifax Regional Police and the staff at our community centres. The Working Groups have also been instrumental in helping us map out climate-related risks to our critical infrastructure and move to renewable energy at the Ragged Lake Transit Centre.



