

Community update

August 2023 Issue 3

August 2023 | Issue 3

The HalifACT community update is an overview of the many projects that are happening in the municipality as part of our once-in-a-generation <u>HalifACT Climate</u> <u>Action Plan</u>. This issue provides an update on the new work that the municipality and its partners are doing to mitigate and prepare for the impacts of climate change.

HalifACT is one of the most ambitious climate action movements in Canada and we're committed to keeping residents informed of the ways we're leading, collaborating and supporting the climate movement in the Halifax region.

FOREWORD ••••••••••••••

The following foreword about the region's recent wildfires was written by Director of Environment & Climate Change, Shannon Miedema, before the devastating flash flooding occurred across Nova Scotia. The municipality will be acknowledging and addressing the floods in the next HalifACT community update.

Wildfire. A word that instills fear and heartache in people around the world. Here in Nova Scotia, we have seen firsthand how out of control wildfires can threaten communities, wildlife and their supporting ecosystems.

Wildfires are increasing in size, frequency and severity because of climate change. More than four million hectares (three quarters of the size of Nova Scotia) have been burned by wildfire across Canada so far this year, about 20 times the annual average, and it is still early summer. Whether the fires are started by humans or by lightning (about half and half in Canada), wildfires are worsening as a result of hotter, drier and windier conditions.

To make matters worse, wildfire is a huge contributor to the greenhouse gas emissions that cause climate change. Wildfire was the single biggest source of emissions in our country in 2021. It's a vicious cycle – the slower we are to act to reduce emissions, the more fires we will see. The more fires, the more greenhouse gases emitted into the atmosphere.

Like many of us, I am deeply saddened by the impacts these fires have had on our affected communities – the loss of homes, pets and nature. At the same time, I am grateful for the inspiring work of so many – firefighters and emergency first responders, volunteers, government staff and so many more.



As the director of the municipality's Environment & Climate Change division, I'm motivated to do the hard, but necessary, work of combating the causes of climate change while also preparing for its consequences. Our window of opportunity, while quickly closing, is still open. Through <u>HalifACT</u>, our climate action plan, the municipality is committed to working with partners throughout the region towards a greener, safer future for present and future generations.

HalifACT sets out ambitious reduction targets founded in climate science and outlines actions based on existing and proven technologies. Half of the 46 actions outlined in HalifACT focus on adapting to climate change and building our resilience to its impacts.

We must think carefully as we recover and rebuild. Let's look to the guidance in the United Nations' principle of <u>Building Back Better</u>, adopted after the devastating 2004 Indian Ocean Tsunami. Building Back Better means working towards real resilience in recovery by addressing the root causes of our vulnerability. The United Nations recognizes that local governments are critical players in rebuilding to meet community needs.

The municipality has developed resources to help better address our safety during extreme weather events and other climate impacts, from emergency preparedness kits to guidance on how to safeguard your property against fires, floods and other threats. Learn more from programs like <u>FireSmart</u> about how to reduce the impact of a wildfire on your home. We are working hard to create detailed climate hazard maps and have reserved funds to improve the condition of critical infrastructure like roads and community shelters to better withstand these impacts.

The municipality is devoting significant funding and human resources to climate action. Perhaps most importantly, we are making climate action a priority in every aspect of our operations. But we cannot do this alone. Our success relies upon strong partnerships with other orders of government, utilities, academic institutions, businesses, communities, non-profits and residents.

What future do you want to live in? What future do you want for the people who come after us? Our future hinges on the decisions we make now. We can all choose to be part of the solution. Every action, big or small, adds to our collective impact. Let's support each other as we recover from these fires and build back better and stronger, together.

Shannon Miedema

Director, Environment & Climate Change Halifax Regional Municipality



The municipality's **Environment & Climate Change team** supported wellwater testing for residents returning home after being evacuated during the fires. During a wildfire, well water can become contaminated with bacteria and chemicals from the fire itself or from chemicals that seep into the water supply or from physical damage to the well head. Staff worked with volunteers to take and store samples during recovery efforts.

The municipality is not alone in facing the challenge of addressing climate change; more than 600 municipalities in Canada have declared a climate emergency. Communities across the country are confronting the adverse impacts of climate change in the form of floods, fires and extreme heat.

One of the ways the municipality is adapting to extreme weather is by providing tools and information to keep residents prepared. The HalifACT team recently partnered with the Emergency Management division of the municipality to support the purchase of 1,000 storm kits to help newcomer families and others across the region equip themselves for future severe weather events. They also worked with the YMCA Halifax to create preparedness resources for newcomers, outlining how to be ready for winter storms, hurricanes and extreme heat. These resources contain local emergency contact information and are available in multiple languages to support our diverse communities.



Municipal staff packing storm kits at the Emergency Operations Centre





Investments in the Halifax region



Investments in the Halifax region

Green Shores natural infrastructure project

In May 2023, Regional Council <u>approved a \$5 million investment</u> to rehabilitate the shoreline on Shore Road in Eastern Passage with more resilient green infrastructure. The federal government will contribute \$3 million to the project and the municipality will contribute \$2 million.

Spanning half a kilometre of shoreline, the <u>Green Shores Project</u> will use smart natural solutions to help us adapt to the effects of climate change. Existing infrastructure does not hold up to the increasing height and intensity of waves, especially during extreme weather. This project will install a new raised waterfront trail, along with a cobble beach, native vegetation and a breakwater system to address wave energy. Not only will this help protect the road from dangerous flooding and washout, it will also guard against erosion and restore the intertidal habitats of marine life to the area.



Names and titles from left to right: Becky Kent, Councillor, District 3 | Darrell Samson, Member of Parliament | Mike Savage, Mayor of Halifax

What is a Green Shore? The municipality's approach to rehabilitate the shoreline on Shore Road reflects the <u>Green Shores for Shoreline</u> <u>Development Program</u>. Developed by the Stewardship Centre for British Columbia,

the program outlines guiding principles to help waterfront property owners and managers to develop their properties in a shore-friendly way.



Managing our natural assets

Together with the <u>Natural Assets Initiative</u> (NAI), the municipality is embarking on a natural asset management strategy in the Nine Mile River Watershed, building from <u>a</u> <u>natural asset inventory</u> developed in 2021. Natural assets include all the resources and ecosystems — like wetlands, forests, rivers and parks — that we rely on for services such as stormwater management and erosion control.

This culturally and ecologically significant watershed is 135 square kilometres and contains many interconnected ecosystems. Through this project, NAI and the municipality will work to enhance stormwater management services and improve climate resilience through the protection and management of natural assets found in the watershed.

Did you know?

The municipality is home to over 1,000 lakes, more than 20 rivers, innumerable streams and 23 major coastal shorelines. These bodies of water span more than 30 subwatersheds, providing places for recreation, and fish and wildlife habitats.



Planting thousands of trees on municipal land

From May to November 2023, the municipality will <u>plant around 2,500</u> <u>trees</u> on municipally owned land to help improve air quality and stormwater management, and to provide more shade in our urban landscape.

By planting a wide variety of tree species, we will be contributing to the resiliency and diversity of our urban forest. Residents can ask for trees to be planted on municipal land by <u>contacting 311</u>.



Investments in the Halifax region

Resilient Home Retrofits pilot project

In May 2023, Nova Scotia Environment and Climate Change Minister Timothy Halman announced \$5.4 million in funding for two new programs that will help Nova Scotians reduce their greenhouse gas emissions and better prepare for climate change. Much of the \$5.4 million in funding will be used for a <u>Community Climate Capacity Support</u> <u>Program</u> that helps communities act on climate projects.

The remaining funds will be invested by Clean Foundation, the Halifax Regional Municipality and the Town of New Glasgow to pilot a resilient home retrofits program to address the risk of flooding caused by climate change. The learnings from this project will help inform a potential new program to help property owners reduce their energy demand, add renewable energy and increase resilience to climate impacts. Because the Halifax region has many older buildings that rely on oil furnaces for heating, **about 70 per cent of our greenhouse gas emissions come from buildings.** To achieve a netzero economy and meet the targets outlined in HalifACT, a large percentage of these buildings will need to be retrofitted.

The Building Decarbonization Alliance highlights the work of government and industry leaders in reducing greenhouse gas emissions by reducing the carbon footprint of buildings. When this update was issued, the Alliance's <u>website</u> featured one of the municipality's net-zero ready buildings, Fire Station 62 in Williamswood, which includes such features as a 47.4 kW rooftop solar PV array and cold climate air-to-water heat pumps that provide in-floor heating.





LakeWatchers spring and summer sampling

The Halifax region has a bounty of lakes, but their water quality and health have not been consistently measured and recorded over time. Now in its second year, the municipality's <u>LakeWatchers</u> program unites municipal staff with community volunteers to conduct water quality sampling and collect data to help us better understand the health of our lakes.

Spring sampling is complete, and summer sampling is underway until August 31. If you're interested in getting involved, and you live on or near one of the <u>72 lakes</u> selected for the program, contact <u>water@halifax.ca</u> to learn how you can take part in a future sampling.

As a community-driven science initiative, LakeWatchers trains community volunteers who, in most cases, do not have any professional training. They are learning on the job and connecting to nature by becoming stewards of our lakes.



Community update

Community action and engagement



Halifax Common Aquatic Facility

On July 6, the <u>Halifax Common Aquatic Facility</u> opened for public use and residents from across the region came out to enjoy the sun and experience the highly anticipated outdoor oasis for the first time.

The facility features a 13,500 square foot pool with capacity for 300 swimmers, a multipurpose room for community events and recreation programming, a modular stage for performers, as well as universal washrooms and change rooms. The water plaza features interactive inground fountain sprays with lighting and sequencing that will provide a multi-sensory and interactive play experience for people of all ages.

During the public engagement phase of the project, equal access and energy efficiency were two themes highlighted by residents.

The new facility is net-zero ready*, with 97 rooftop solar panels and air-to-water heat pumps, among other energy-efficient features. Even the water plaza was designed to recapture water that will be used to water the adjacent sports fields on the Common.

*Net-zero ready means reducing a building's energy consumption as much as possible given site limitations and existing technologies, with the intention to purchase off-site renewables or carbon offsets as they become available to achieve net zero. Net zero means that 100 per cent of a building's energy need is generated on site or off site through a renewable source.





HalifACT and Halifax Public Libraries engagement series

We partnered with Halifax Public Libraries to organize a series of conversations about climate change. What we heard from the wide array of residents who use our 16 library locations is that they are worried about climate change and they want to see action now.

Participants were full of ideas about how to shape our community in more resilient, inclusive and equitable ways. Many called for affordable and electrified public transit, clean energy, corporate accountability and more information that will help them cope with the climate emergency.

Interested to find out more about what we heard? Explore some of the <u>findings</u>.

Efficient Public

HalifACT Acting on Climate Together



This year, Halifax was ranked the 11th most sustainable city in the world in the 2023 Corporate Knights' Sustainable Cities Index. The index evaluates sustainability based on water and air quality, public transit, energy systems and the efficiency of buildings. This honour is a testament to our commitment to acting on the goals of our climate plan in these key areas.



Climate Action Challenge 2

HalifACT and the Halifax Innovation Outpost once again teamed up to ask businesses, organizations and community groups to pitch their innovative ideas for helping to address climate change and environmental issues. The second Climate Action Challenge asked for trailblazing projects related to resilient building technology, renewable energy, clean transportation, green jobs and food security. The top three 2023 projects were Laure Nolte and Habit Studio's lowcarbon mycelium insulation, Navigate Energy's efforts to make North Brewing a net-zero company and Greenii's upcycling program that turns newspapers into beautiful handcrafted bags.

Interested to see what these changemakers have been working on? **Watch the** highlights on <u>YouTube</u>.

Electric vehicle test rides

From May to July, the municipality partnered with <u>Next Ride</u> to host events where residents could test drive electric vehicles (EVs), get information about EV rebates and learn more about the links between transportation and climate change. Events were scheduled in each district across the municipality, with many taking place next to future locations of the initial 18 EV charging stations being installed later this year.

The test drive events and installation of EV charging infrastructure are part of the long-term goals of the municipality's <u>Electric Vehicle Strategy</u>, which aims to reduce greenhouse gas emissions to mitigate climate change.



Keep an eye out on the streets for the **municipality's newest electric van**, wrapped in our environment-themed artwork.



In March 2023, the municipality held a Low-Impact Development training session through the Sustainable Technologies Education Program (STEP). More than 100 municipal employees learned about green infrastructure and the importance of nature-based solutions for sustainable development. The STEP introductory course is a great way for key players to learn about the benefits of low-impact development for climate action.



Community update

Government, business and community partnerships



Government, business and community partnerships

JustFOOD Action Plan released

In March 2023, Part A of the JustFOOD Action Plan was released, describing the vision for food justice in the urban and rural communities of the municipality. The JustFOOD Action Plan is the first step toward bringing about positive changes and greater resilience in our local food system. Taking a proactive approach, JustFOOD and HalifACT are collaborating with innovators in the community to create an equitable, localized and dignified system of food production and distribution. The average distance that food travels to get to Nova Scotia is 4,000 km. This makes the municipality's food system particularly vulnerable to climate change. If there is an unexpected event or emergency that causes widespread instability, we may not have the local resources to meet the needs of our residents.

Dalhousie University's Transforming Climate Action project gets a boost

Dalhousie University is a major partner in our region's efforts to produce a low-carbon future. The university has received an unprecedented \$154 million investment from the Canada First Research Excellence Fund to study the ocean's ability to absorb carbon. Learn more about why this project is bringing together experts in oceanography, atmospheric science, Indigenous knowledge, engineering, data science and maritime law to study the critical North Atlantic carbon sink.





Government, business and community partnerships

CEO Climate Action Charter

March 2023 saw the launch of a collaboration between business and municipal leaders focused on encouraging meaningful climate action. Wendy Luther, President and CEO of the Halifax Partnership called the CEO Climate Action Charter "an important milestone in our collective efforts to combat climate change." Organizations like <u>EfficiencyOne</u> and <u>Nova Scotia Power</u> have signed on, as have academic institutions like <u>the Nova Scotia Community</u> <u>College</u> and <u>Dalhousie University</u>.

Some key commitments of the charter include:

- embed climate goals in an organization's culture and values
- track and share climate action goals and initiatives
- participate in two-way communication between industry and government
- support an equitable transition
- acknowledge climate action as a business imperative

The CEO Climate Action

Charter is a central part of *People. Planet. Prosperity. Halifax's Inclusive Economic Strategy 2022 – 2027.* Find out more about the <u>five-year</u> <u>strategy</u> for sustainable development.

The Tamarack Institute for Community Engagement at the University of Waterloo devoted an <u>extensive case study</u> to **highlighting the goals and gains of HalifACT.** The study emphasizes that the plan is a vision for environmental repair but also for economic vitality and viability that aims to bring together many different municipal operations for the purpose of climate action.



