

THEME 9

LEADING THROUGH ACTION ON CLIMATE

Climate change is real, urgent, complex, and a global crisis. With the changing climate, we face hazards to health, economic growth, safety and the natural world. In HRM, Regional Council has declared a climate emergency and, guided by HalifACT the Municipality is working to reduce greenhouse gas emissions and support communities' resiliency to the effects of climate change.

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

The IPCC, the United Nations' body for assessing the science related to climate change, provides policymakers with regular scientific assessments on climate change, its implications and potential future risks, and puts forward adaption and mitigation options.

HALIFACT: ACTING ON CLIMATE TOGETHER

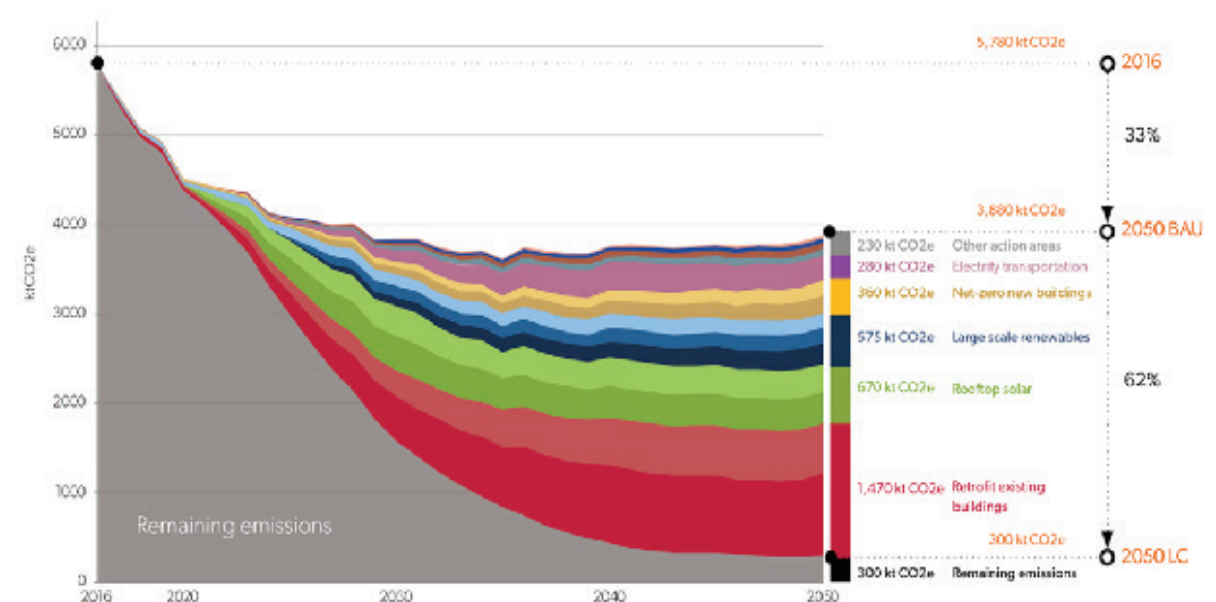
[HalifACT: Acting on Climate Together](#) is the Municipality's long-term climate action plan to reduce emissions and help communities adapt to a changing climate. The priority plan aligns with the 1.5-degree Celsius pathway recommended by the Intergovernmental Panel on Climate Change. The plan sets a target of net-zero municipal operations by 2030, and community-wide targets of a 75% emissions reduction from the baseline year of 2016 by 2030, and net-zero emissions by 2050.

[HalifACT](#) is a community-wide plan with many stakeholders, and with the complexity that the climate crisis presents, implementation requires

a new way of thinking and working. Climate impacts need to be considered as a critical part of all planning initiatives. The Regional Plan Review provides an opportunity to further integrate the climate targets and actions outlined in [HalifACT](#) into the Municipality's planning documents in a more comprehensive way.

THE REGIONAL PLAN REVIEW WILL:

9.1 Update the Environment, Energy and Climate Change chapter of the Regional Plan to reflect HalifACT's net-zero emissions targets and require consideration of climate impacts across issue areas.



EFFICIENT, RESILIENT BUILDINGS AND RENEWABLE ENERGY

To achieve the Municipality's climate action goals and reduce our collective GHG emissions, [HalifACT](#)'s recommendations include specific actions that can be supported through planning policy and land use regulations.

In 2016, buildings accounted for approximately 70% of total energy use in Halifax and 77% of total emissions. Retrofitting existing buildings and ensuring that new buildings are more efficient are necessary components of a successful energy transition. The design of new buildings can maximize energy performance by considering solar orientation, building shape, energy performance of the envelope and roof, high-efficiency equipment and adding on-site renewable energy. Although existing buildings are constrained by design decisions made in the past, retrofitting existing buildings will also be important to make sure the Municipality's buildings are more energy efficient and resilient to future climate impacts such as severe storms, flooding and heat.

Significantly reducing GHG emissions will require switching away from higher-carbon fuels like fuel oil and natural gas to zero carbon fuels like renewable electricity, renewable natural gas and green hydrogen. Renewable energy generation and energy storage will reduce emissions and help communities to

become more resilient to power outages from extreme weather events. Existing programs, such as the Municipality's solar energy financing program, Solar City, will be adapted and expanded to include deep energy retrofits and climate resilience measures. Opportunities for low carbon district energy and microgrid systems can be explored through major planning projects. Wide-spread adoption of electric vehicles will require planning for and building charging infrastructure throughout the region.

THE REGIONAL PLAN REVIEW WILL:

- 9.2 Consider adopting policy to encourage net-zero and climate resilient new construction when considering discretionary planning applications.**
- 9.3 Consider adopting policy to encourage the use of alternative energy systems, such as district energy and microgrids, as part of secondary planning and master neighbourhood planning projects.**
- 9.4 Review land use by-laws to identify regulations that may be a barrier for solar installations, energy storage systems, and electric vehicle infrastructure, and adjust land use policy and regulations as necessary.**
- 9.5 Review the Regional Plan's wind energy policy to ensure it reflects current technology and provides opportunities for large-scale wind energy generation.**

EMERGENCY MANAGEMENT AND CRITICAL INFRASTRUCTURE RESILIENCY

Understanding climate change hazards and impacts, especially in vulnerable communities, are a critical aspect of Emergency Management and a core action of [HalifACT](#). Infrastructure faces challenges related to capacity and age, as well as the impacts of extreme climate events. As climate events become more extreme and occur more frequently, increases in disruption and damage to these infrastructure systems, and the subsequent costs to repair or replace them will increase. When these systems fail, there can be significant impacts on the environment, society, and economy. As the region sees increased growth, emergency services and climate change impacts must be better incorporated into the planning process.

[HalifACT](#) identified that critical infrastructure needs to withstand the impacts of climate change, both in the near and long term. This will require the Municipality to proactively protect and strengthen infrastructure to ensure it can withstand climate change impacts such as increasingly extreme storms and climbing average temperatures. Improving community resilience will reduce the resources needed for emergency response and to repair or replace infrastructure. Understanding where, what and how much action and investment is required to

reduce the risk to Halifax's critical infrastructure requires a better understanding of the risks and vulnerabilities these systems face in a changing climate.

Not all people will be affected equally by climate change. Vulnerable communities are those who may face increased exposure to climate risks, increased sensitivity to climate risks, and/or limited adaptive capacity for coping with climate impacts. Similarly, not all will be able to equally contribute to the significant action and investment required to decarbonize. The Municipality must take a leadership role to identify climate risk and develop strategies to mitigate that risk.

THE REGIONAL PLAN REVIEW WILL:

- 9.6 Identify current and future climate change hazards and critical infrastructure at risk to extreme climate events.**
- 9.7 Adopt policy to prioritize resiliency measures that will help reduce risk, protect critical infrastructure and require building back better.**
- 9.8 Adopt policy to require emergency management services and current and future climate change hazard projections are considered as part of the as-of-right development process, discretionary planning applications, and during reviews of secondary plans and land use by-laws.**