

NBP Climate Action Plan 2022-2030

Climate Action Together

Summary Report

To our community,

Climate change is a global emergency that affects us all. None of us are immune to its effects, and we all have a responsibility to contribute to its solutions. Even a community like the Northern Bruce Peninsula – small, rural, and removed from the areas we often associate with the most significant impacts of climate change – will be profoundly impacted in the coming decades. It is time to do our part and prepare.

This Climate Action Plan is our community's response to the many challenges posed by climate change. It is the culmination of many months of work which began with the appointment of the Municipal Climate Action Committee in 2020. Through the generous support of the Bruce Peninsula Biosphere Association, funding from Environment and Climate Change Canada, as well as a variety of other community organizations, the project team engaged all corners of our community – nearly one thousand voices in all – to develop an ambitious but practical plan that Northern Bruce Peninsula can be proud of.

The Plan includes more than thirty initiatives spanning across all aspects of life on the Peninsula: where we live, how we move, what waste we produce, and what natural areas we enjoy. As the name suggests, this plan is action-oriented: each initiative has specific steps, milestones, and owners. However, these details are intended to serve as a guide, as the implementation of each will depend on the availability of funding and resources throughout the life of the Plan. Overall, the Plan is designed to be flexible: it provides a roadmap for action until 2030, though one we hope establishes a foundation for change that spans much longer than that.

The Climate Action Plan will significantly reduce Northern Bruce Peninsula's contribution to climate change. In conjunction with policies from other levels of government and new technologies that are expected to arrive in the coming years, we believe the Plan will result in a 20% reduction of greenhouse gas emissions from 2020 to 2030. The Plan will also increase the community's resilience to growing climate threats from wildfire, rising temperatures, and more intense storms. At the same time, the Plan will also reinforce many of the features of the Peninsula that already make it so cherished by so many – including its natural beauty and our connectedness to nature.

This plan is not enough on its own: addressing climate change requires more than individual actions by our community. Political action, transformation of industries, and a host of other societal changes are outside of the scope of this plan but no less important. Yet this plan is a crucial step to to get our own house in order. It will set us on a path to reduce our contribution to climate change and prepare for the consequences of climate change. Ultimately, it is a strong start to a journey with much further to go.

We are grateful for the community's support throughout this project and look forward to continuing this work in the many months ahead.

Sincerely,

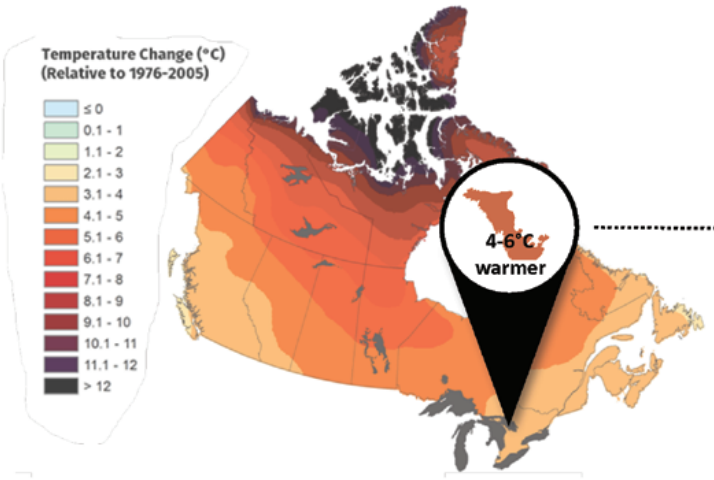
Northern Bruce Peninsula Climate Action Committee

Our Changing Climate

With two national parks, numerous provincial nature reserves, and a host of other natural assets, Northern Bruce Peninsula is beloved by residents and visitors alike for its unique and precious environment. These features make the effects of climate change that are predicted for the Peninsula all the more significant.

Before the end of this century the Bruce Peninsula will be warmer, wetter, and more environmentally vulnerable than it is today. The strong storms that crash through our harbours in summer and cut-off communities in winter will become more frequent. The heatwaves that threaten our most vulnerable and impact the local economy will become more common. The ever-present threat of fire will grow. And previously local species of trees, birds, and other wildlife will be forced to move on to more accommodating climates.

Average Annual Temperature Increase by 2080



Impacts for Northern Bruce Peninsula

Changing Seasons
In winter, nearly 20% more snow despite a month later frost; in summer, 7 weeks of 30°C days and 20°C evenings

Rising Water Levels
1.5m increase in the high water mark on Lake Huron; greater frequency of flooding due to rapid rainfall

Intensifying Storms
25-year storms now hit every 5-years; gale force winds substantially more common

Increasing Fire Risk
Month longer fire season, with increased potential for large scale events

Weakening Ecosystems
50% of tree species and 20% of bird species at risk; frequent disruption to aquatic life due to warming of lakes

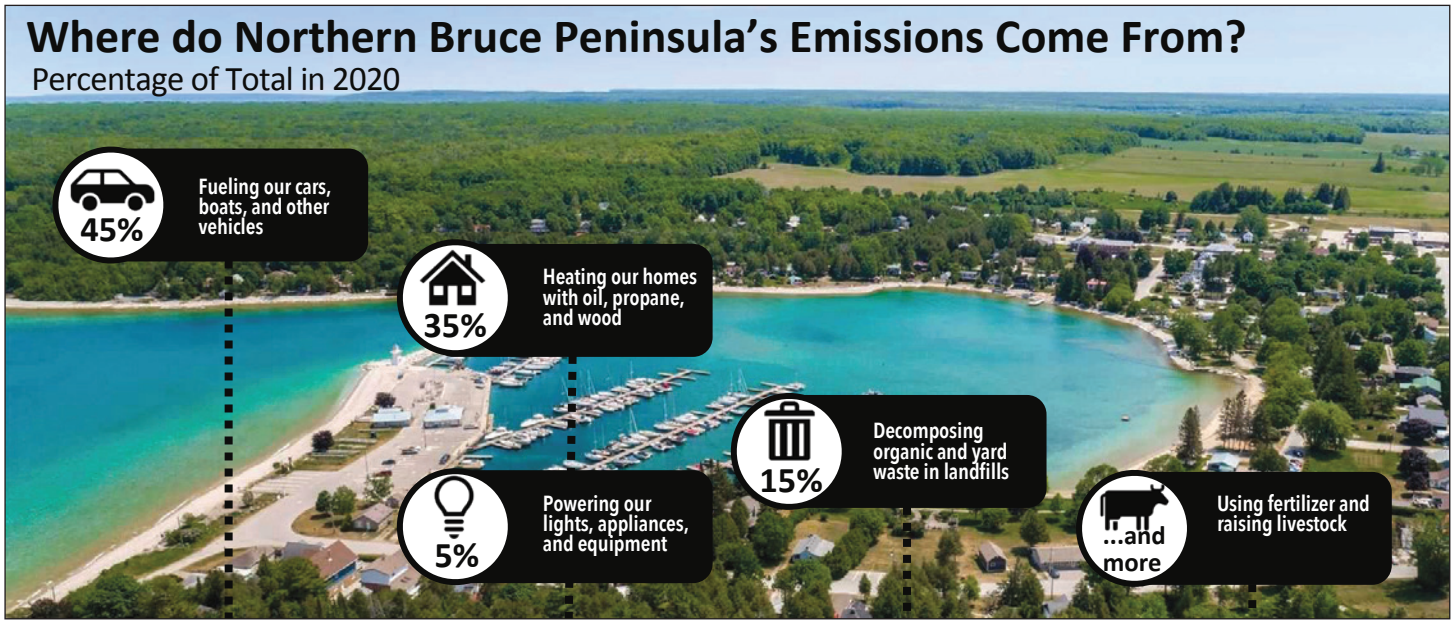
Source: *Prairie Climate Centre*, Climate Atlas of Canada (2019)

Our Climate Contribution

Northern Bruce Peninsula is a unique contributor to the climate crisis in its own way. Though our population is small and we lack high-emitting heavy industries, many of the features of our community result in emission rates greater than one might expect for a community of our size.

As a rural community, the distances traveled to, from, and within the Peninsula by both residents and visitors are significant and overwhelmingly made in gasoline powered vehicles. Our buildings are typically older and larger than those seen elsewhere, requiring more energy to stay warm while frequently relying on high-emitting fuels such as propane. Although our recycling rates are the envy of many other rural communities, the organic waste we send to the landfill contributes meaningfully to our emissions every year. Even a sector like agriculture – despite its ability to take carbon out of the atmosphere – contributes to emissions through its farm equipment and fertilizer use.

In nearly all of these areas, our contribution to climate change is expected to grow over the coming years: without action, our emissions will grow by as much as 10% from 2020 to 2030. This poses a daunting challenge for the Northern Bruce Peninsula – not only to stem the growth in our emissions, but to reduce them significantly.



Our History of Climate Action

Northern Bruce Peninsula already has a proud history of climate action that pre-dates this plan. It provides us with a strong foundation for all the work required by this Plan. Some highlights of recent local efforts are shown below.













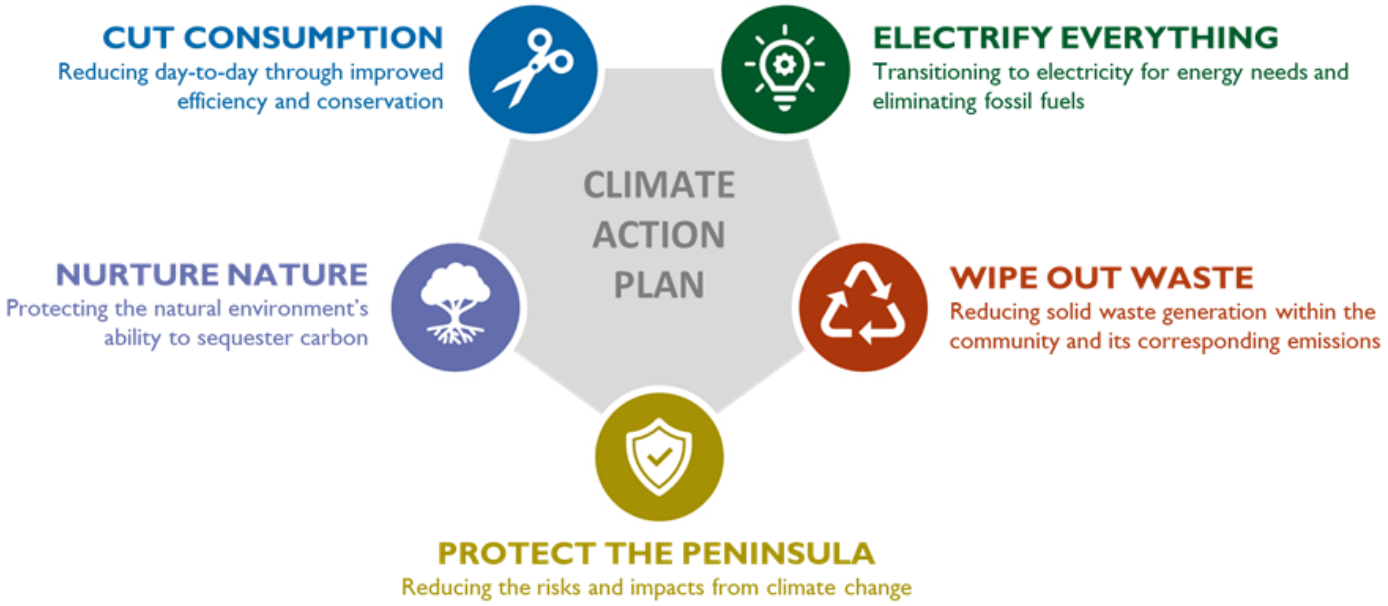




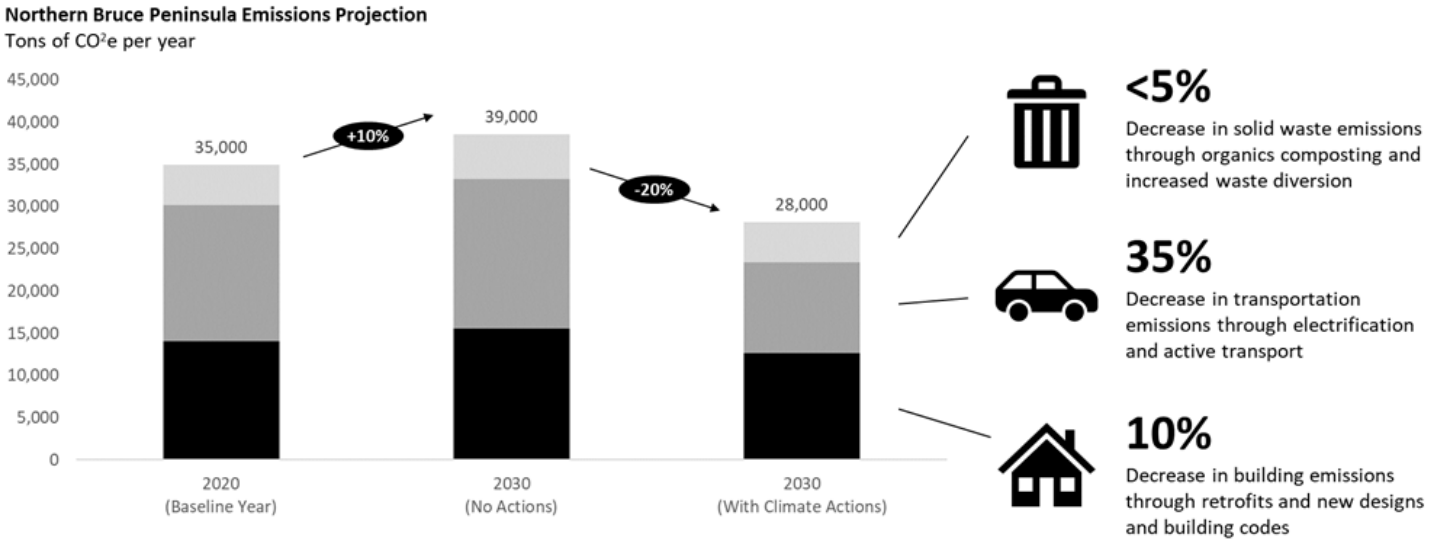
A Climate Action Plan for Northern Bruce Peninsula

This Climate Action Plan is our community's response to the many challenges posed by climate change. It was developed through an intensive, year-long process starting with the creation of the Municipality's Climate Action Committee – a citizen-led, volunteer group appointed by the council to develop a community response to this global challenge. The project has involved input from hundreds of residents, business owners, non-profits, representatives from Saugeen Ojibway Nation, and scientific experts – many of whom are listed at the end of this report.

The Climate Action Plan includes five areas where the community must act. For each area, we have developed a plan spanning the rest of this decade – internationally recognized as the time-frame we have to act on climate change in order to avoid its worst effects. Given political and technological uncertainties, many of the initiatives outlined are targeted for completion in the early years of this Plan. As a result, there will be a need to revisit this plan regularly and incorporate new ideas.



Through focused effort in the years to come, we believe that by following this Plan together we can make significant progress in addressing climate change. The Plan has set an ambitious but practical goal of reducing greenhouse gas emissions by 20% by 2030 – which would represent a significant milestone for a community of our size and resources. The plan will also reduce risks and better prepare us for the local impacts of climate change.



Climate Action #1
CUT CONSUMPTION

WHAT IT MEANS

These actions will look to reduce the energy that we consume at home, at work, or on the road.

It involves energy efficiency investments, policy changes, and new behaviors all aiming to reduce energy demand.

WHY IT IS IMPORTANT

Cutting consumption is an inclusive action: there are many low or no cost steps that everyone can take.

While the emissions reduced may be modest, it will play a critical role in creating the movement for climate action.

WHERE WE MUST GO

50%

of residents and businesses report that they have taken at least one action to reduce their energy consumption by 2030

HOW DO WE GET THERE

REDUCE OUR ENERGY CONSUMPTION AT HOME



Higher density homes in Lion's Head



New low-energy home in Neyaashiinigmiing (Cape Croker)

1.1 LAUNCH LOCAL ENERGY CONSERVATION CAMPAIGN

The community has shown keen interest in energy conservation, but it is often unclear on the best ways to do so. We will run annual energy efficiency campaigns to promote conservation at home and work.

1.2 IMPLEMENT PRO-CLIMATE PLANNING POLICIES

Current local planning policies prevent new buildings from being as energy efficient as possible. We will explore new policies to permit smaller, denser, and more efficient homes on the Peninsula.

1.3 BUILD LOCAL ENERGY EFFICIENCY INDUSTRY

The Peninsula lacks trained energy auditors, heat-pump installers and other contractors needed to support energy efficiency. We will recruit and train new skilled tradespeople to help develop this new industry.

PROMOTE ALTERNATIVE FORMS OF TRANSPORTATION



New cycling routes along Highway 6



Summer pedestrian issues in Tobermory

1.4 EXPAND CYCLING ROUTES & INFRASTRUCTURE

Cycling is an increasingly popular alternative to vehicles. Working with the local, county, & provincial governments we will expand our bike lanes, safety signage and other amenities to promote cycling

1.5 IMPROVE PEDESTRIAN MOBILITY

It is often unsafe or impractical for pedestrians to get around Tobermory and Lion's Head. We will expand sidewalks, snow clearing, and road markings to make walking a safer and more viable alternative to driving.

1.6 REDUCE EMISSIONS FROM OFF-PENINSULA TRIPS

Travel on-and-off the Peninsula is a large source of emissions. We will look to reduce these impacts by expanding shuttle / rideshare options while partnering with other tourism destinations on a Visitor Emissions Strategy.

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Climate Action #2
ELECTRIFY EVERYTHING

WHAT IT MEANS
Electrification focuses on reducing local consumption of fossil fuels for heating and transportation.

It will involve education on new electric options and eliminating the barriers to their eventual adoption.

WHY IT IS IMPORTANT
Ontario's electrical grid is low emitting, making it a far superior alternative to gas, propane, & other fossil fuels.

Electric options are already growing in popularity, but adoption can be accelerated with focused climate action.

WHERE WE MUST GO
40%

of vehicles on the Peninsula are electric by 2030.

25%

of propane or oil buildings are converted by 2030.

HOW DO WE GET THERE

ELECTRIFY OUR BUILDINGS



New electric heat pump on the Peninsula



View from the soon-to-be redeveloped Lion's Head Arena

2.1 SUPPORT HOME ELECTRIFICATION
Many buildings on the Peninsula rely on fossil fuels for heat and appliances. We will support homeowners and businesses converting to electricity & look for ways to power more local buildings with solar energy.

2.2 DEVELOP FUNDING PROGRAM FOR RETROFITS
For some of our older and larger buildings, converting to electric heat will be expensive. Partnering with other levels of government, we will explore potential funding programs for retrofits by homeowners & businesses.

2.3 UPGRADE MUNICIPAL FACILITIES
Municipal buildings are amongst the largest emitters on the Peninsula. As part of planned maintenance or redevelopment, we will implement energy saving upgrades – starting with the Lion's Head arena.

ELECTRIFY OUR TRANSPORTATION



New EV chargers in Lion's Head



Tour boat fleet in Tobermory harbour

2.4 CHAMPION ADOPTION OF ELECTRIC VEHICLES
Electric vehicle technology and affordability is steadily improving - and so too is local interest. We will continue our EV promotion campaign to help residents test drive, research, and choose the right EV for them.

2.5 EXPAND CHARGING INFRASTRUCTURE
The number of EV chargers has grown significantly on the Peninsula. We will complete the charging network by adding chargers at public buildings and encourage installs at private residences & businesses.

2.6 PURSUE ZERO-EMISSIONS HEAVY-DUTY VEHICLES
While larger vehicles and equipment are key emitters, few electric alternatives exist today. We will work with local businesses to promote adoption of low emissions technologies as they become viable.

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Climate Action #3

WIPE OUT WASTE

WHAT IT MEANS

These actions build on the community's strong history of reducing waste and promoting recycling.

Actions will also introduce new programs, and use municipal policies to encourage waste diversion.

WHY IT IS IMPORTANT

Waste reduction is yet another climate action that is accessible to anyone.

The actions focus on the largest sources of emissions from waste: organics, paper, and cardboard.

WHERE WE MUST GO

50%

Reduction in household organic waste entering the landfill by 2030.

HOW DO WE GET THERE

REDUCE ORGANIC WASTE



Bear-safe composters in Bruce Peninsula

3.1 EXPAND USE OF BACKYARD COMPOSTING

Composting has been popular on the Peninsula, but participation is still inconsistent. We will expand the promotion and education around composting to ensure it is viewed as practical solution for waste.

3.2 INCREASE OPTIONS FOR ORGANIC COLLECTION & DROP-OFF

While composting is key, we must also create other options for organics that are practical. We will partner with Bruce County and local businesses to explore organic curbside pick-up or drop-off locations.

3.3 EXPLORE LANDFILL ALTERNATIVES FOR YARD WASTE

Current practices of burning yard waste result in rapid release of greenhouse gas emissions. We will test alternative programs for utilizing yard waste that reduce its climate impact.

INCREASE WASTE DIVERSION & PREVENTION



Two-stream waste bins in Lion's Head

3.4 INTRODUCE NEW RECYCLING OPTIONS

Diversion and reuse programs at our landfills have a strong track record of reducing waste. We will identify and implement additional recycling programs - starting with construction waste and other common sources.

3.5 INCREASE ADOPTION OF BLUE BOX PROGRAMS

Though our recycling rate leads Bruce County we can still do better. We will assess the current blue box program and identify modifications to pick-up days, materials, and other features to increase recycling rates.

3.6 EVALUATE OTHER WASTE REDUCTION POLICIES

Our waste fees and limits are less strict than many other communities – which does little to discourage waste. We will assess bag tags, recycling requirements, and other policies that encourage waste reduction

Climate Action #4
NURTURE NATURE

WHAT IT MEANS
These actions focus on improving or maintaining the health of local ecosystems – both agricultural & natural.

The initiatives build on years of conservation work by local farmers, community groups, and all levels of government.

WHY IT IS IMPORTANT
Healthy natural ecosystems remove carbon from the atmosphere and embed it in our trees, plants, and soil.

This process – known as carbon sequestration – helps to slow down and reverse climate change.

WHERE WE MUST GO
75%

of local farms have participated in at least one sustainability or climate-related initiative by 2030

HOW DO WE GET THERE

SUPPORT CLIMATE COMPATIBLE AGRICULTURE


Bale wrap recycling in Bruce County


On-farm renewable energy in Bruce County

4.1 PROMOTE THE CARBON SEQUESTRATION POTENTIAL OF FARMING
Many practices - such as cover crops or low-till farming - can reduce agricultural emissions and even remove atmospheric carbon. We will work with farmers to promote these practices and support their widespread use.

4.2 PILOT INNOVATIVE ON-FARM EMISSIONS INITIATIVES
The Peninsula's farming community has historically shown a strong appetite for innovation & experimentation. We will build on this legacy through annual experiments of new technologies.

4.3 PROTECT FARMLAND, WOODLOTS AND WETLANDS
Agricultural and natural areas frequently face pressures from further development. Through municipal zoning / planning policy, we will protect the status and climate mitigation potential of these areas.

SUPPORT LOCAL ECOSYSTEM HEALTH


Monitoring in Bruce Peninsula National Park


Tree planting in Bruce County

4.4 MEASURE THE CLIMATE IMPACT OF OUR NATURAL AREAS
Our forests, wetlands, and other natural areas have potential to help sequester carbon under the right conditions. We will conduct the first local assessment of the carbon released or sequestered by our ecosystems.

4.5 IMPROVE MONITORING OF ECOSYSTEM HEALTH
There have been numerous initiatives to analyze local ecosystem health. We will implement a regular monitoring program that coordinates these previous efforts to measure climate change impacts

4.6 MAXIMIZE CARBON SEQUESTRATION IN OUR FORESTS & WETLANDS
The amount of carbon sequestered in our natural areas has grown over time. Partnering with Federal & Provincial agencies, we will implement leading ecosystem management practices to ensure this trend continues.

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Climate Action #5

PROTECT THE PENINSULA

WHAT IT MEANS

These actions focus on increasing the Peninsula's resilience to the eventual impact of climate change.

They prioritize the two greatest risks for the community identified by climate science: fire & storms.

WHY IT IS IMPORTANT

Some amount of climate change is now inevitable; these actions will help prepare for its impacts.

Many of these actions require years of preparation to be effective and so are critical to launch well in advance.

WHERE WE MUST GO

100%

Inclusion of climate change projections in municipal emergency planning, design standards and operation plans by 2030.

HOW DO WE GET THERE

REDUCE RISKS DUE TO WILDFIRE



NBP Volunteer firefighter exercise in 2019

5.1 PREVENT WILDFIRE IGNITION AND SPREAD

Climate change, increased tourism, and more development are increasing the local risk of fire. We will implement new community programs designed to educate and prepare residents & visitors for fire.

5.2 SUPPORT VOLUNTEER FIREFIGHTER FORCE

While traditional focus of our volunteer firefighters has been on urban fire, the requirements to fight wildfire are different. We will acquire new equipment and training to prepare for this growing risk.

5.3 EXPAND PREPARATIONS FOR EVACUATIONS

Northern Bruce Peninsula has greatly expanded its emergency planning in recent years. We will incorporate and run exercises to prepare for the highest risk climate-related events.

REDUCE RISKS DUE TO MAJOR STORMS



Strong Fall Storm at Lion's Head Lighthouse



Snow Squalls & Low Visibility on Highway 6

5.4 UPDATE EMERGENCY COMMUNICATIONS PROTOCOLS

The Peninsula's demographics mean it has a higher proportion of vulnerable persons. We will revitalize the municipality's persons-at-risk registry and implement a "Check-in-on-your Neighbour" program.

5.5 REDUCE RISKS FOR ISOLATED COMMUNITIES

Several parts of the Peninsula are at-risk of being physically cut-off during storms. We will conduct regular education outreach to these communities and implement windbreaks to reduce the risks of isolation.

5.6 INCREASE RESILIENCE OF OUR INFRASTRUCTURE

The Peninsula's roads, bridges, and other infrastructure were built for climate conditions that will soon change. We will update our design standards, map specific risks, and conduct upgrades to prepare.

Mobilizing for Action

Implementing the many components of this plan is no small task – and one that no single organization can accomplish on its own. Fortunately, Northern Bruce Peninsula has a long history of partnering across all sectors - a trend that will continue with the launch of this Climate Action Plan.

The **Municipality of Northern Bruce Peninsula** has a crucial role to play in laying the foundation the execution of the Plan. They will establish the policies that make climate action possible and incorporate it in plans for land use, infrastructure, and asset management. They will also implement policies - such as the new Green Purchasing Policy - that ensure climate is a key consideration in municipal decision-making around key services and investments. Finally, they will implement energy efficiency upgrades initiatives to their own facilities and assets where funding and business cases are supportive - both to minimize their emissions, and also to demonstrate leadership to the rest of the community.

Municipal Committees of Council will also play a key role in delivering the Plan. These committees are appointed for a single term of Council and so their exact scope of focus will vary. However, regardless of which committees are present in future terms - whether there continues to be a dedicated Climate Action Committee or the role is divided amongst several - these committees will play an important role in helping to coordinate the various actions contained in this Plan. Their research, analysis, and advice to Council will also help ensure that the Climate Action Plan stays on track towards its ambitious targets - and that the plan is routinely updated and adjusted accordingly.

Community organizations will play another important role as the primary advocates for the Plan. Using their network of volunteers, programs, and community events, these groups will educate and raise awareness about the need for climate action – and guide friends, family, and neighbours on what those specific actions are. They will continue to be an engine for obtaining grants and testing new, experimental ways to reduce emissions in the community - in the same way they have over recent years.

Further Information

For more details on Northern Bruce Peninsula's Climate Action Plan please visit www.letstalknbp.ca/climate-action to view the Technical Report. For any questions on the Climate Action Plan please contact us at climate-action@bpba.ca.

Territory Acknowledgment

Saugeen (Bruce) Peninsula is within the traditional territories of the Anishinabek Nation: The People of the Three Fires known as Ojibway, Odawa, and Pottawatomie Nations. The Climate Action Committee gives thanks to the Chippewas of Saugeen, and the Chippewas of Nawash, known collectively as the Saugeen Ojibway Nation, as the traditional keepers of this land, and for their important contributions to this project.

Project Contributors

The Climate Action Plan was developed by the Municipality of Northern Bruce Peninsula's Climate Action Committee. The Committee was formed in late 2020 with the mandate to develop the Plan, as well as support a wide range of climate initiatives. The Committee was supported in its work by Will Meneray of Canvas Strategy Consulting Group, through the generous funding of Bruce Peninsula Biosphere Association and Environment and Climate Change Canada.

Several individuals and organizations were crucial to the development of Northern Bruce Peninsula's first ever Climate Action Plan. We express our thanks to each of them for their enormous contributions - as well as to the nearly the 1,000 members of the public who provided their input to the Plan.

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Contributing Organizations

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For more information, please see:

https://www.canada.ca/en/environment-climate-change.html