

PORT ELGIN

CORPORATE ACTION PLAN UPDATE

MILESTONE 4

March 2020



Activity + Timeline	Partners/Resources Needed	Estimated Emissions Reduction	Update as of March 2020
<p>Replace existing high-pressure sodium lighting with LEDs. 87 have been replaced. 4 more are scheduled to be replaced (once hornet and birds' nests are removed) for a total of 91.</p> <p>Started summer 2014</p>	<p>NB Power</p> <p>NB Power is taking care of installation. They rent the lights to the village.</p>	<p>NB Power estimates that one LED streetlight saves 0.225 tonnes of GHGs/year.</p> <p>91 lights in Port Elgin will save 20 tonnes of CO₂e / year.</p>	<p>Completed.</p>
<p>Cut less grass. In order to save fuel, grass will be cut less often by walking trails and around the skating rink (eg. no more than every two weeks, depending on the weather). A community rain garden has also been planted, helping to naturalize a small part of the village park.</p> <p>The project is ongoing.</p>	<p>Village Public Works</p> <p>None. Existing machinery will be used less often. Gas will be saved.</p>	<p>Litre of gasoline is said to emit 2.38kg of carbon dioxide. By cutting a bit less grass, one litre of gas could be saved over the course of a year.</p>	<p>Grass is cut a couple times a year around by the walking trails and skating rink. The parks are mowed every week.</p>

Plant 10 trees per year for 6 years (until 2021 target). This will help to offset carbon emissions. 2012-ongoing	Village Public Works Funding of \$600/year for trees, compost, mulch, etc. (Potential funding sources: Tree Canada, Environmental Trust Fund, Eco-Action, MTA Green Investment Fund.)	There are various estimates for how much carbon a tree takes up. We take a mid-range estimate of 12kg per year for a “young tree”. Planting a total of 60 trees over six year (10/year) could offset 720kg CO2.	EOS planted 100 saplings with students at Port Elgin Regional School in 2018-2019 school year along the path that runs toward Church Street. EOS is planted another 120 trees along the Gaspereau River in fall 2019 to help with erosion but they will also help offset carbon.
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New energy efficient sewer pumps installed (3 above and 2 in ground). All sewer pumps have been replaced within the last 5 years.	Village Council and Public Works None. Already completed.	Comparing the energy saved in other communities who have upgrading their sewage pumps, Port Elgin could save 251kg of GHG emissions per year.	Completed.
Investigate installing solar panels to power the pumps (cost, return on investment, number of panels needed, location for best solar potential, etc.) Medium to long term project length.	Village council, staff and EOS Eco-Energy Inc. Research could be done internally for no cost or by EOS Eco-Energy. Solar panel cost could be funded by Gas Tax funds or MTA Green Investment Fund. Price of panel depends on watts needed.	Port Elgin currently uses about 32,748kwh for their lift stations annually. This translates into 8252 kg of GHG emissions. Powering with solar would eliminate these emissions.	There has been no action on this.
Switch lift station from diesel to propane. Was completed in 2013	Village council and staff None needed.	According to www.propane.ca propane emits 30% less GHG emissions than diesel.	Completed

<p>Purchase a new fuel-efficient or hybrid truck. Currently own a 2004 Ford 150.</p> <p>Long-term (no plan to purchase a new truck right now)</p>	<p>Village council and staff</p> <p>Municipal savings could cover some of the cost and a loan may be needed for the balance. Trading in the old truck will also contribute. Depending on model and year purchased could be \$30,000+.</p>	<p>According to www.greencarreports.ca the most fuel efficient full size pickup truck on the market in 2015 is the Dodge Ram 1500 with a combined MPG of 23. The 2004 Ford 150 has a combined MPG of only 14. If an upgrade was made 177g/mile of GHG emissions could be saved. Savings will continue to increase as vehicles become more efficient or switch to electric.</p>	<p>A new truck was purchased in 2016, a 2012 4x4 Dodge Ram, that runs on gasoline.</p>
<p>Purchase a new fuel-efficient fire truck. Currently have a 1999 GMC Pumper, 2000 Ford E350 Rescue Van, and 2008 INT Fire Truck.</p> <p>Long-term</p>	<p>Village council and volunteer fire department</p> <p>Municipal savings could cover some of the cost and a loan may be needed for the balance. Trading in the old truck will also contribute. Depending on model and year purchased could be \$100,000 to \$400,000.</p>	<p>Savings will depend on model purchased.</p>	<p>The GMC pumper truck will be replaced with a new model (probably a 2020) that will hold about 100 more gallons of water than the current one does.</p> <p>There is a tender out at the moment, and the province of New Brunswick is taking care of the details.</p> <p>The slightly larger water tank will not have a huge impact on the fuel efficiency of the fire truck, so we expect some emission reductions from this purchase.</p>
<p>Perform energy audit(s) on any new municipal building acquisitions.</p> <p>2015</p>	<p>Council and staff \$800 for an energy audit. Funding could come from Building Canada Fund, Environmental Trust Fund, MTA Green Investment Fund, Gas Tax, etc.</p>	<p>Emissions reduction will depend on recommendations completed from the energy audit.</p>	<p>There has been no action on this.</p>

<p>Solar panels on municipal building. Panels could heat water (thermal) and/or provide electricity (photovoltaic).</p> <p>Long-term</p>	<p>Council and Staff with EOS Eco-Energy \$7000 will cover the cost of two solar panels and solar hot water system installation. Funding could come from the MTA Green Investment Fund, through EOS Eco-Energy, Gas Tax, etc.</p>	<p>Solar hot water alone could save 2500kwh or 630kg of CO2 (according to CanSIA calculations for solar hot water system savings)</p>	<p>There has been no action on this.</p>
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