

# Local Action Plan to Reduce Emissions in Port Elgin, NB

## Milestone 3 of the Partners for Climate Protection Program

Endorsed by Port Elgin Village Council March 9, 2015

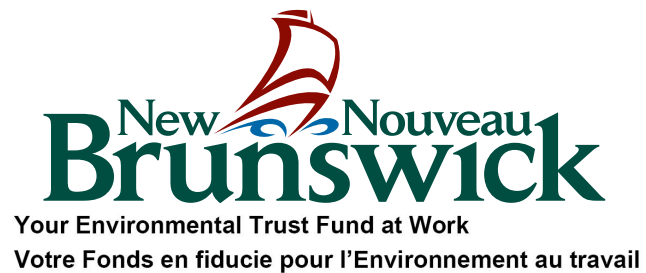
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March 2015

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This project was funded by and in partnership with:



THE VILLAGE OF  
PORT ELGIN YOUR PORT OF CALL

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## Introduction

Port Elgin has been a member of the national Partners for Climate Protection (PCP) program since 2009. The PCP program, administered by the Federation of Canadian Municipalities, is a 5-step process to save energy and reduce carbon emissions at the municipal level. In 2011 the community undertook the first milestone, which involved a baseline emissions study. The study found that municipal operations released 99 metric tonnes of carbon dioxide into the atmosphere that year while the community released 6,069 metric tonnes. During 2014 the Port Elgin Village Council passed motions to reduce their municipal emissions by 20% and community emissions by 6% by the year 2021 (Milestone 2). This report outlines the local action plan to reduce energy and carbon emissions, which was designed by the Village during 2014/15 (milestone 3). The action planning process was led by the environmental non-profit EOS Eco-Energy Inc. with funding from the New Brunswick Environmental Trust Fund.

## Our Community

The Village of Port Elgin, New Brunswick is located at the mouth of Gaspereaux River along the Northumberland Strait and is known for its rich natural diversity, saltwater marshes and productive agricultural fields. The community lies near the New Brunswick/Nova Scotia border, 70km from the city of Moncton, NB. It has an aging population of 418 spread across roughly 18.55km<sup>2</sup>. This small coastal community has a kindergarten to grade 8 school, health centre, churches, a small wharf, museum, fair grounds, seniors housing complexes, bank, fire station, RCMP station, community parks, and a few small restaurants and storefronts. It is also home to Atlantic Windows, a window manufacturer, and PEDVAC (Port Elgin District Volunteer Action Council).

## Community Vision

Working to reduce emissions and save energy is part of Port Elgin's long-term sustainability plan. Port Elgin's vision statement comes from the 2011 *Picture Port Elgin* integrated community sustainability plan. It states:

*Understanding where we have come from, and what we value today, we picture a future in which Port Elgin:*

- *Is a safe, accessible, friendly and close-knit community that boasts an exceptional quality of life for all;*
- *Supports a diverse, local business sector based on sustainable development principals;*
- *Celebrates our maritime heritage; and*
- *Engages residents in creating a clean, healthy community and environment.*

## **Project Goals and Objectives**

The main goal of the project was to design a local action plan to reduce energy and carbon emissions locally in Port Elgin. In order to accomplish this the following objectives were set:

1. Use the emissions inventory and emissions reduction targets for municipal operations and the community to guide the municipal action planning process
2. Engage municipal staff in action planning for emissions reduction from municipal operations.
3. Engage Port Elgin residents, business owners and representatives from institutions, organizations and local students in action planning for emissions reduction for the community.
4. Compile all information into a useful and feasible local action plan.



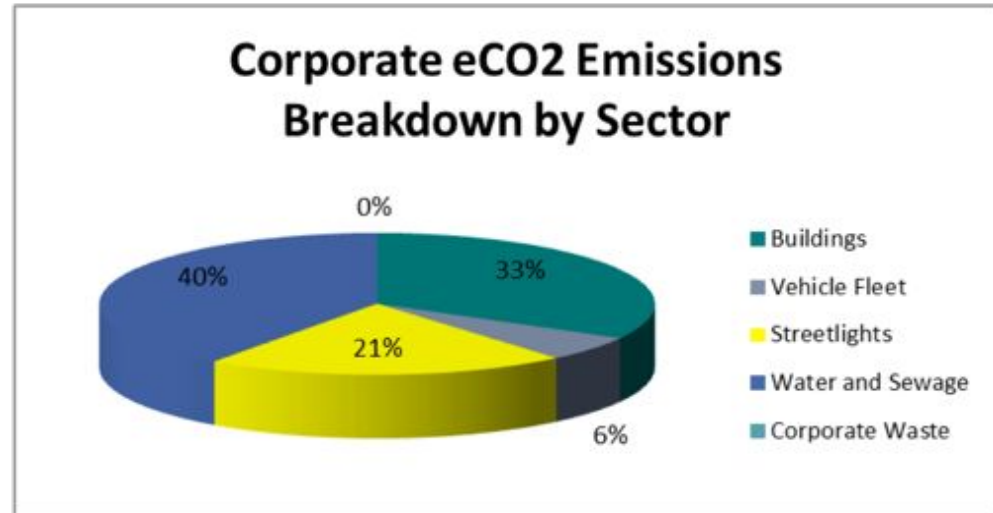
Port Elgin. Photo credit:  
[http://en.wikipedia.org/wiki/Port\\_Elgin,\\_New\\_Brunswick](http://en.wikipedia.org/wiki/Port_Elgin,_New_Brunswick)

## Summary of Emissions Inventory and Forecasts (Milestone 1)

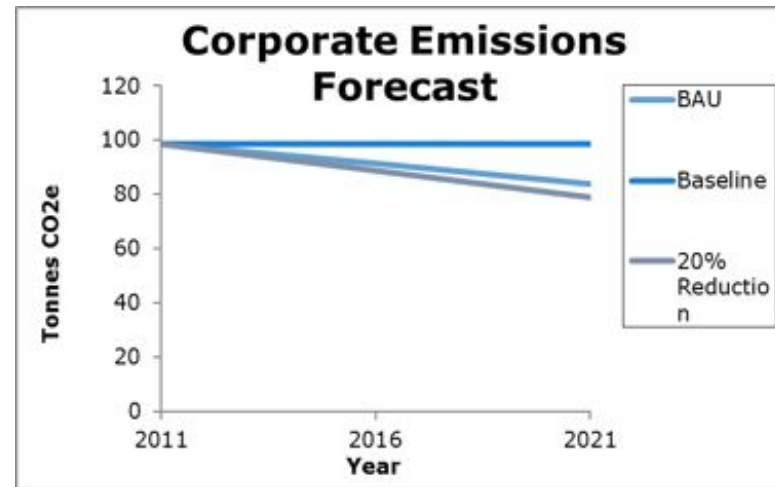
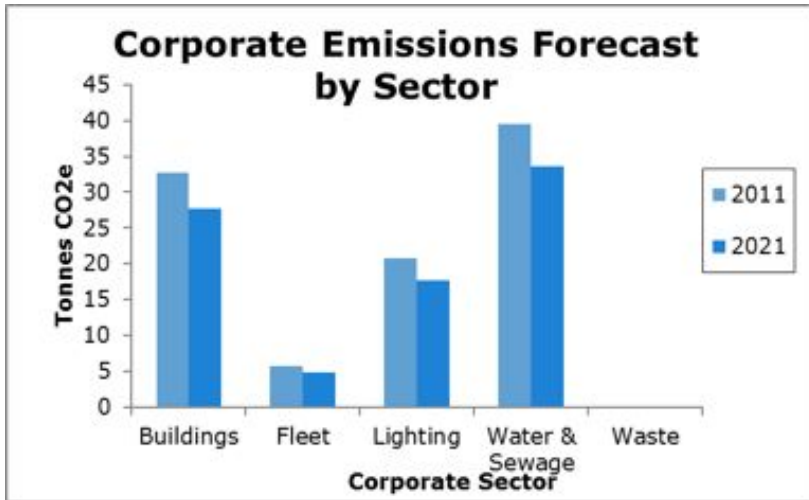
During 2011 emissions inventories and forecasts were completed for municipal operations and the community of Port Elgin (Milestone 1).

### Municipal Operations

Emissions from all municipal emissions were found to be 99 metric tonnes of carbon dioxide equivalent (t CO<sub>2</sub>e) in 2011. This calculation included emissions from all municipally-owned buildings, vehicle fleet, streetlights, water and sewage and corporate waste. Emissions from corporate waste were found to be negligible and are thus shown to be 0% in the graph. The largest percentage of emissions comes from water and sewage treatment (40%).

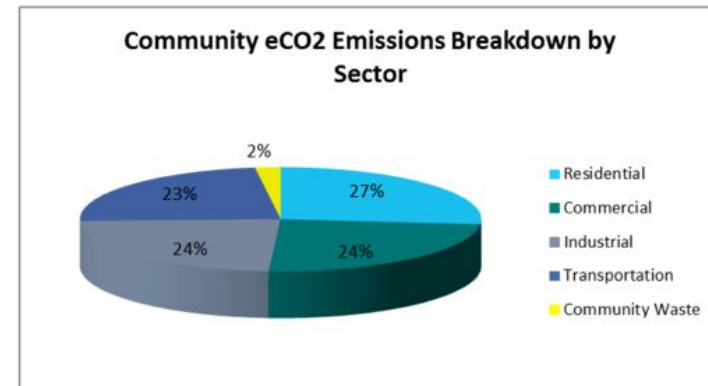


Emissions from municipal operations were then forecasted for the next ten years (until 2021). Port Elgin is currently experiencing a shrinking and aging population and this is expected to continue. Thus the business as usual forecast and the 20% reduction forecast are similar (see graphs on the next page). Despite the forecast of a smaller population the Village is committed to taking additional actions to reduce their emissions and live more sustainably.

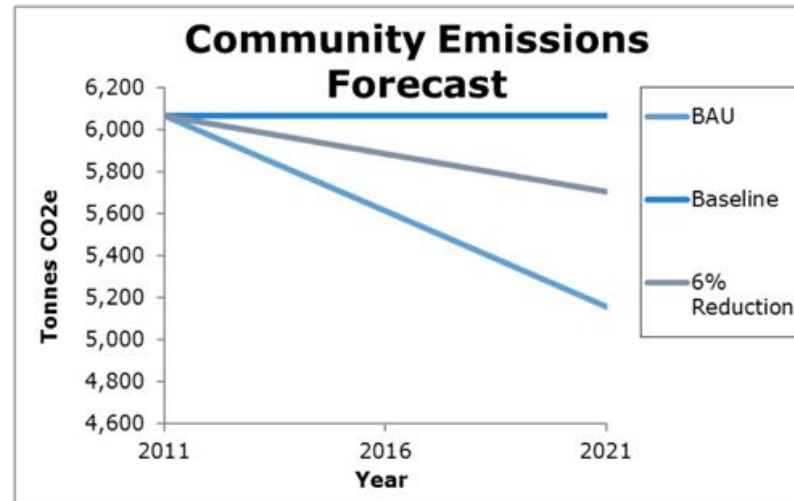
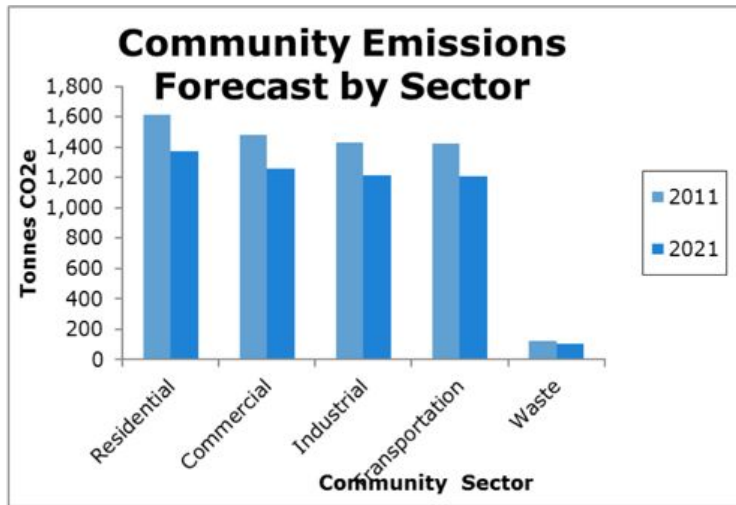


### Community

Emissions from the rest of the community of Port Elgin were found to be 6,069 t CO2e in 2011. This calculation included emissions from residential buildings, businesses and institutions (commercial), industry, transportation and community waste. The largest percentage of emissions comes from residential buildings (27%).



Emissions from community sources were then forecasted for the next ten years (until 2021). As stated earlier Port Elgin is currently experiencing a shrinking and aging population and this is expected to continue. Because of this the business as usual forecast results in a much lower emission level than the PCP recommended 6% reduction level (see graphs on the next page). Despite the forecast of a much smaller population local residents are committed to taking additional actions to reduce their emissions and live more sustainably.



## Emissions Reduction Targets (Milestone 2)

### Municipal Operations

During winter 2014 the Village Council agreed to reduce emissions from municipal operations by 20% by 2021. Twenty percent equals 20 t CO2e. The endorsement from Council recognized the decreasing population in Port Elgin and that a higher reduction may be possible.

### Community

During winter 2014 the Village Council worked with EOS to gauge public acceptance to reduce community emissions by at least 6% by 2021. This equals a reduction of 364 t CO2e. Participants in a community meeting supported the reduction target. The endorsement from Council recognized the decreasing population in Port Elgin and that a higher reduction may be possible.



## Methodology for Milestone 3

The methodology for developing this action plan had five parts:

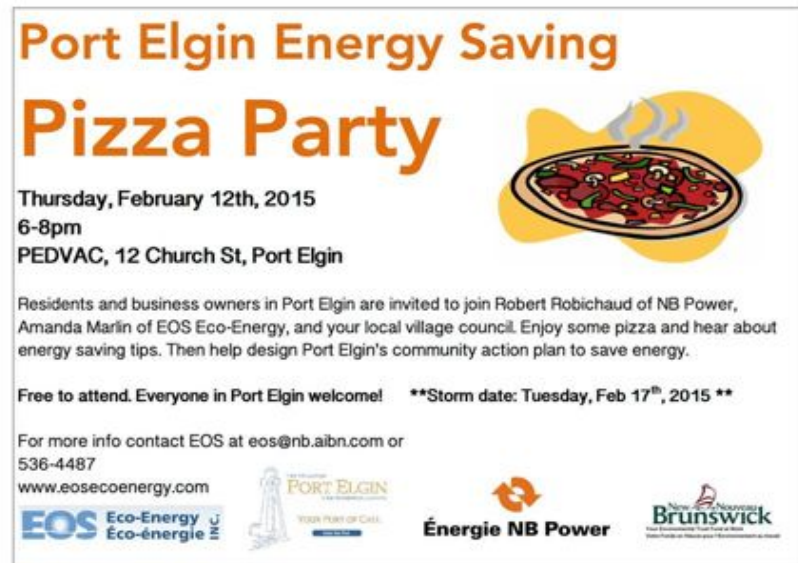
1. Background research
2. Meeting with municipal staff and council
3. Community engagement
4. Youth engagement
5. Presentation of local action plan for council and public

### Background Research

The emissions inventory and reduction targets for Port Elgin were reviewed. Local action plans from other rural communities across Canada were accessed from the Partners for Climate Protection website and reviewed as well.

### Meeting with Municipal Staff and Council

EOS Eco-Energy staff began by meeting with representatives from the Village of Port Elgin including the village clerk, public works, councilors and mayor November 3, 2014. They provided input, brainstormed, and agreed on actions to reach their municipal reduction target of 20% below 2011 levels. The municipal action plan is outlined at the end of this report. It was important to begin with the municipal plan in order for the municipal government to lead the community by example.



Poster for Port Elgin community engagement meeting.

## Community Engagement

Community engagement for the local action plan was sought in a number of ways. A discussion was started on the Picture Port Elgin Facebook Page, a page created during the community integrated sustainability plan for the community in 2011. In addition, articles about the PCP program and the village's plan to reduce emissions were included in the local Tribune-Post newspaper (see the Appendix for a selection). Information and requests for input into the plan were also posted to social media sites such as Twitter, Facebook pages, and EOS Eco-Energy's website. Press releases were sent to the media and the story was picked up by the local community radio station. Announcements were also included in EOS's winter 2015 newsletter. Residents were invited to provide input via social media, email, and telephone. EOS also had information booths at popular community events such as the Port Elgin Lupin Quilt and Craft Fair and Christmas Moonlight Madness. Finally the public was invited to attend a special community meeting and pizza party. Community representatives of the seniors group, school, library, Pedvac (volunteer group and food bank), and local businesses such as the bank, etc. were contacted directly via email and/or telephone and invited personally.

Ten people participated in the "Port Elgin Energy Saving Pizza Party" during the evening of February 12<sup>th</sup>, 2015 including representatives from Pedvac (local volunteer organization, community centre and food bank), the village office, and local residents. They spanned in age from their teens to their 60s, and included both long-time residents and newcomers to the community. Participants were treated to a pizza party and listened to a presentation by Robert Robichaud, residential energy advisor with NB Power. His informative presentation included basic information about how electricity works, how to save energy and increase efficiency. He stressed the importance of adequate insulation before the addition of new technologies such as heat pumps or solar panels. He gave each participant a new energy-



Robert Robichaud of NB Power presents at a Port Elgin community meeting. Photo credit: A. Marlin.

saving LED light bulb as well. After the presentation participants discussed ways for the community to save energy and reduce emissions. The community action plan is outlined at the end of this report.

### Engaging Youth at Port Elgin Regional School

EOS Eco-Energy staff visited Port Elgin Regional School and brought hands on activities so students could learn about climate change impacts and sustainable energy solutions. Eighty-eight students in grades 5 through 8 took part in activities to learn more about climate change and energy issues. The students then brainstormed ideas for how to save energy at their school and across the village of Port Elgin. They wrote letters to the mayor and council in Port Elgin. Their ideas included:

- **Meatless Monday** at the cafeteria every week. Students plan to bring this idea to the cafeteria lady, whom they feel will be receptive.
- **Bring back the “Walk to School” program.** In the past every month there was a walk to school day designated and all busses would park a distance from the school and students would walk the rest of the way. In addition, students commented that too many who live near the school get a lift when they could easily walk. They intend to start an awareness campaign. This was a very popular idea among the students.
- **Turning off lights,** use energy saving lights, use natural light, learn without the lights on.
- **Use less air conditioning.** Open a window instead.
- **Repair drafts.** Check and repair drafty doors and windows.

Tuesday, February 3<sup>rd</sup>, 2015  
Mayor Judy Scott and the Port Elgin Village Council  
Village of Port Elgin  
41 East Main Street  
Port Elgin NB E4M 2X8

Dear, Mayor Scott and Council,

We, the students in grade 5 at Port Elgin Regional School, are happy to know that our village is taking action against climate change and thinking about our future by being part of the Partners for Climate Protection Program.

We would like to see the village, including our school, save energy and reduce greenhouse gasses in the following ways:

We Need MORE WindMills! At least one Biogas. A scooterskateboard so that kids arent playing video games and wasting power.  
thats our reasons, please take these reasons into thought

Sincerely, your best Friends  
CARTER, JORIS, BRADEN, Jacob and Scott

Tuesday, February 3<sup>rd</sup>, 2015  
Mayor Judy Scott and the Port Elgin Village Council  
Village of Port Elgin  
41 East Main Street  
Port Elgin NB E4M 2X8

Dear, Mayor Scott and Council,

We, the students in grade Seven at Port Elgin Regional School, are happy to know that our village is taking action against climate change and thinking about our future by being part of the Partners for Climate Protection Program.

We would like to see the village, including our school, save energy and reduce greenhouse gasses in the following ways:

- Learn with lights off when possible  
- Reduce Lunch time Starboge  
- Recycle more  
- Solar panels at school

Sincerely, Aussy, Hunter, Noah, Hailey

- **Walking, biking and carpooling more.** Students would also like to see a community bus or shuttle service. They would like people to use less gas and fossil fuels.
- **Solar power.** More residents, businesses and organizations should use solar power. Students would like to see solar panels at their school and village office as well.
- **Wind power.** Have wind turbines in Port Elgin.
- **Buy local.** Encourage people to buy local and support local farms.
- **A skateboard/scooter park.** The students felt that an outdoor skateboard park would encourage kids to get outside, rather than sitting in front of TVs, ipads, computers, video games, etc. which all take electricity.
- **Plant gardens.** Students would like to see more flowers and plants in their community.
- **Recycling and composting.** Students would like to see more recycling and composting taking place across the community. They would like to reduce lunchtime garbage at their school.



Students learned about renewable energy and contributed to Port Elgin's action plan. Photo credit: A Marlin.

Many of the students' ideas were incorporated into the municipal and community action plans presented on the next pages.

### **Presentation and Review of Local Action Plan with Council and Public**

EOS staff presented the completed local action plan at the Port Elgin Village council meeting on March 9<sup>th</sup>, 2015. Input, feedback and comments were provided and final changes were made.

## Municipal Action Plan 2011-2021

Total emissions saved from the proposed activities in the Municipal action plan below could save more than 30 tonnes of green house gas emissions (or carbon dioxide equivalent), which would exceed the 20% reduction target of 20 t C02e.

### Priority Areas

The priorities areas for energy savings and emissions reduction in Port Elgin are:

- Update Street Lighting to LED
- Increase the amount of natural landscapes (gardens, trees, etc.) on municipally owned property
- Upgrades to water and sewer services
- Increase efficiencies in the municipal fleet
- Efficiency upgrades to municipal buildings

Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
<b>1. Update Street Lighting</b>				
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.	NB Power	NB Power is taking care of installation. They rent the lights to the village.	Started summer 2014	NB Power estimates that one LED street light saves 0.225 tonnes of GHGs/year.  91 lights in Port Elgin will save 20 tonnes of C02e / year.
<b>2. Naturalizing Municipal-owned Landscapes</b>				
Cut less grass. In order to save fuel, grass will be cut less often by walking	Village Public Works	None. Existing machinery will be used	Ongoing	A Litre of gasoline is said to emit 2.38kg of carbon dioxide.

Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
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.		left often. Gas will be saved.		By cutting a bit less grass, one litre of gas could be saved over the course of a year.
Plant 10 trees per year for 6 years (until 2021 target). This will help to offset carbon emissions.	Village Public Works	Funding of \$600/year for trees, compost, mulch, etc. (Potential funding sources: Tree Canada, Environmental Trust Fund, EcoAction, MTA Green Investment Fund.)	2012-ongoing	There area 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 C02.
<b>3. Upgrades to Water and Sewer</b>				
New energy efficient sewer pumps installed (3 above and 2 in ground).	Village Council and Public Works	None. Already completed.	All sewer pumps have been replaced within the last 5 years.	Comparing the energy saved in other communities who have upgrading their sewage pumps, Port Elgin could save 251kg of GHG emissions per year.
Investigate installing solar panels to power the pumps (cost, return on investment, number of panels needed, location for best solar potential, etc)	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.	Medium to long term	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.



Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
Switch lift station from diesel to propane.	Village council and staff	None needed.	Was completed in 2013	According to <a href="http://www.propane.ca">www.propane.ca</a> propane emits 30% less GHG emissions than diesel.
<b>4. Increase Efficiencies of the Municipal Fleet</b>				
Purchase a new fuel-efficient or hybrid truck. Currently own a 2004 Ford 150.	Village council and staff	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+.	Long-term (no plan to purchase a new truck right now)	According to <a href="http://www.greencarreports.ca">www.greencarreports.ca</a> 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.
Purchase a new fuel-efficient fire truck. Currently have a 1999 GMC Pumper, 2000 Ford E350 Rescue Van, and 2008 INT Fire Truck.	Village council and volunteer fire department	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.	Long-term	Savings will depend on model purchased.
<b>5. Efficiency Upgrades to New Municipal Building (Village Office and Town Garage)</b>				
Perform energy audit(s) on any new municipal building acquisitions.	Council and staff	\$800 for an energy audit. Funding could	2015	Emissions reduction will depend on recommendations

Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
		come Building Canada Fund, Environmental Trust Fund, MTA Green Investment Fund, Gas Tax, etc.		completed from the energy audit.
Solar panels on municipal building. Panels could heat water (thermal) and/or provide electricity (photovoltaic).	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.	Long-term	Solar hot water alone could save 2500kwh or 630kg of CO2 (according to CanSIA calculations for solar hot water system savings)

## Community Action Plan 2011-2021

It is expected that the community action plan will result in a 6% reduction in greenhouse gas emissions or 364 t CO2e. The plan focuses on educating the local public to make sustainable choices in their everyday lives.

### Priority Areas

The priorities areas for energy savings and emissions reduction in Port Elgin are:

- Change behavior with education campaigns
- Promote solar energy



- Community waste reduction (compost program)
- Energy savings at Port Elgin Regional School
- Community garden
- Community transportation
- Active youth (development of a skateboard park)

Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
Energy Reduction Education Campaign				
Presentations on Saving Energy (tips such as benefits of clothes lines, importance of insulation, etc.). Presentations should be aimed at the general public as well as churches, Rotary Club, local service clubs, etc.	EOS Eco-Energy, NB Power, etc.	No cost involved. Staff time to coordinate events and speakers, workshop venues (could use Village Hall).	2015 and ongoing	If local residents make changes and install clothes lines, insulate their homes, use less water, turn off lights, etc. Significant emissions can be reduced.
Hands-on learning opportunities about climate change, energy use, and emissions at Port Elgin Regional School.	EOS Eco-Energy	\$1000. Funding would be part of a larger project funded by Environmental Trust Fund and/or EcoAction. EOS would receive the funding and coordinate the project.	2015 and annually	Talking about emissions reduction and saving energy at school will result in emissions reduction at the school and at home.
Creation of Port Elgin Community Facebook Page and Community Newsletter. These avenues could be used to communicate and educate the public about emissions reduction and	Village office, councilors, community groups such as Pedvac, PERS, churches,	No resources needed, other than a leader to take the first step in creating these communication tools.	Begin in 2015-2016	Emissions may be reduced and energy saved by local residents who read the ongoing tips and information.

Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
how to save energy.	Rotary Club, service clubs			
<b>Promote Solar Energy</b>				
<p>Solar Bulk Purchase.</p> <p>Coordinate a bulk purchase of solar panels to help reduce the upfront costs.</p>	EOS Eco-Energy	EOS has applied for funding from the NB Environment Trust Fund and EcoAction to promote solar energy across the Tantramar region.	2015/2016	The average family of 4 in Canada uses 9600kwh of electricity annually. In New Brunswick this translates into 2419kg of C02. Thus, each house that switches to solar in Port Elgin could save a significant amount of GHG emissions.
<p>Solar Potential mapping.</p> <p>Mapping of every rooftop in Port Elgin will show the potential for solar energy collection. It will help promote solar as a viable energy source.</p>	EOS Eco-Energy	EOS has applied for funding from the NB Environment Trust Fund and EcoAction to promote solar energy across the Tantramar region.		The average family of 4 in Canada uses 9600kwh of electricity annually. In New Brunswick this translates into 2419kg of C02. Thus, each house that switches to solar in Port Elgin could save a significant amount of GHG emissions.
<p>Workshops on Solar Energy.</p> <p>Workshops on a wide range of topics such as solar panels, solar hot water, PV technology, net metering, passive solar design, smart energy communities, etc. will be provided with a variety of speakers.</p>	EOS Eco-Energy will coordinate the workshop series.	EOS has applied for funding from the NB Environment Trust Fund and EcoAction to promote solar energy across the Tantramar region.	2015-2016	The average family of 4 in Canada uses 9600kwh of electricity annually. In New Brunswick this translates into 2419kg of C02. Thus, each house that switches to solar in Port Elgin could save a significant amount of GHG emissions.

Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
Solar Food Dehydrator Workshop. Solar power has a variety of useful applications. This workshop will help to educate the public while building useful dehydrators.	Pedvac	No funding needed. Could charge participants a small registration fee. How-to guide, workshop space, event coordinator.	Could be offered multiple times between 2015 and 2021	Direct emission reduction from the workshop would be small but still important. It may lead Port Elgin residents to take further steps to save energy and result in further emissions reduction.
Solar Hot Air Workshop. The sun has the power to warm spaces naturally. This workshop will teach participants how to harness the sun's warmth.	Local off grid home owners in southeast NB, EOS Eco-Energy, Village of Port Elgin	Could be offered for free depending on speaker(s), venue, advertising on social media and free community events listings.	2016-2017	Heating costs represent about 60% of homeowners' power bills according to NB Power. Saving energy with the use of solar hot air systems could reduce emissions significantly for homeowners.
<b>Community Waste Reduction</b>				
Residential Compost Program. Reduce residential waste by offering composters at reduced price.	Village Office	If a \$20 rebate was given to 100 households in Port Elgin that would equal \$2000. This funding could come from the Gas Tax Fund of the MTA Green Investment Fund.	2017/2018	According to Earth Day Canada ( <a href="http://www.earthday.ca">www.earthday.ca</a> ) composting can reduce household waste up to 50%.
<b>Energy Reduction at Port Elgin Regional School</b>				
Meatless Monday. Students in Grade 5 will work with the cafeteria to offer meatless dishes every Monday.	Grade 5 students, teachers and cafeteria staff	No funding needed. Meeting time with students and staff, vegetarian and vegan recipe ideas would be	2015-2016 school year (Grade 5 students in 2014/15 will	According to <a href="http://www.cok.net">www.cok.net</a> , eating meatless meals one day a week could save 3.6kg CO2 per year per person.

Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
		needed.	be in grade 6)	
<p>Walk to School.</p> <p>Bring back Walk to School, one day a week per month. Busses stop down the street and all students walk to school. Encourage those who live close to the school to walk instead of getting a drive.</p>	Students in grades 5, and 7/8 will talk to their teachers and principal about bringing this program back.	None, other than a note home to parents to explain the Walk to School program.	Begin the program in 2015-2016 school year.	A Litre of gasoline emits 2.38kg of carbon dioxide. Emissions will be saved by driving less.
Garden at Port Elgin Regional School.	Port Elgin Regional School and parent volunteers	Cost of materials covered by Port Elgin School and their grant(s). Volunteers to do the planting, etc.	Garden plan is complete. Planting will begin spring 2015.	The land was previous mowed so this will save some emissions.
Students will do their best to turn off lights, recycle more, compost, etc.	Students in grades 5 to 8	Funding not needed. Students could make posters to put up around their school.	Immediately	Saving energy with these simple steps will help contribute to emissions reductions.
<b>Sustainable Community Development (Parks and Transportation Initiatives)</b>				
<p>Community garden</p> <p>Plant a community garden at Pedvac. Pedvac's garden will be roughly 1000 sq ft. Plots will be available for local residents. Eating local healthy food and reducing emissions will be promoted.</p>	Pedvac	Volunteers to dig and build garden beds. Applying to United Way Day of Caring. Pedvac is applying for grants to cover cost of materials (compost, lumber, soil, signage, etc).	Beginning in summer 2015 and continuing.	Emissions will be reduced by eating more locally grown food. A litre of gasoline emits 2.38kg of carbon dioxide.
<p>Sustainable Transportation</p> <p>Encourage carpooling, walking and explore options for a community</p>	Village of Port Elgin, EOS, local students, etc.	Education campaign. Research funding (\$10,000) for community	Ongoing	Reducing the number of vehicles on the road will reduce a significant amount of

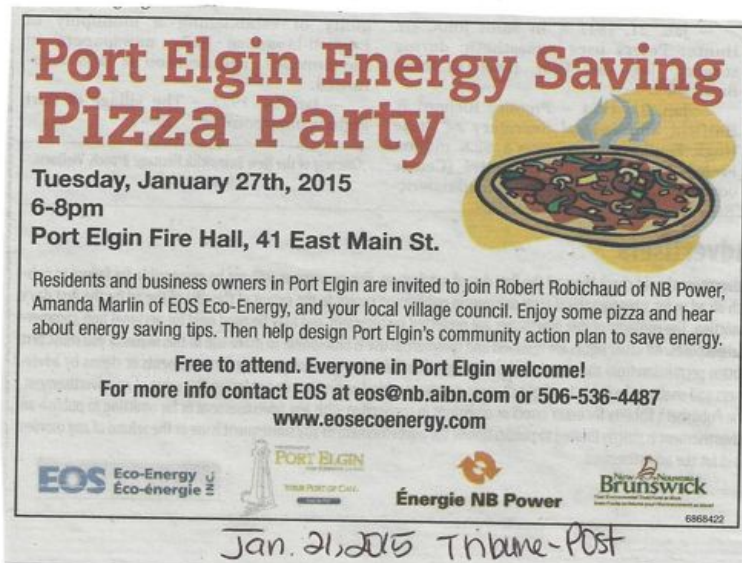
Activity	Lead/Partners	Resources Needed	Timeline	Estimated Emissions Reduction
<p>transportation service. Port Elgin is a small rural community without taxi, bus or train service. Residents need cost effective transportation to medical appointments and to get groceries in Sackville (35km away) and Moncton (70km away).</p>		<p>transportation service. Local Community Inclusion Network and/or United Way may be options for funding for a translation service feasibility study or pilot project.</p>		<p>emission. The average 40 litre car will emit over 95 kg of GHG emissions with each fill up.</p>
<p>Skateboard Park Explore the idea of a local skateboard/scooter park. Help get kids active and away from video games.</p>	<p>Local students, Village of Port Elgin</p>	<p>Funding for development of the park could be obtained from the Family and Youth Capital Assistance Program (NB Regional Development Corp.). Funding cost will depend on location, size of park and features chosen. A portable park with a few wood ramps could be \$3000. A 10,000sq ft park may cost around \$100,000 and require regular maintenance of the surface material (birch, skatelite, etc.) (Source: Skate Park Association International <a href="http://www.spausa.org">http://www.spausa.org</a>)</p>	<p>Long-term</p>	<p>According to <a href="http://ca.complex.com">ca.complex.com</a> just one hour of gaming time spent on an Xbox 360 will use 0.3kwh of power. This translates into 76g of GHG emissions. Thus a skateboard park is a fun way to get local youth outside, active and not using any energy but their own.</p>

## **Implementation, Monitoring and Reporting (Milestone 4 and 5)**

The Village of Port Elgin council and staff will be responsible for implementing the municipal action plan and meeting their target by 2021. The community groups outlined in the community action will be responsible for implementing their activities outlined in the community plan by 2021. Progress will be monitored regularly and an emissions inventory will be performed around the year 2018 to gauge improvement and how close both the municipal government and wider community are to reaching their targets by 2021. Additional inventories will be performed as needed. Once the targets have been reached a final report will be submitted to the PCP program. Progress throughout the rest of the milestones will also be communicated to the public through a variety of means such as the local paper, community meetings and social media.

## Appendices

### Appendix 1 – Selected Media Coverage



**Port Elgin Energy Saving  
Pizza Party**

**Tuesday, January 27th, 2015  
6-8pm  
Port Elgin Fire Hall, 41 East Main St.**

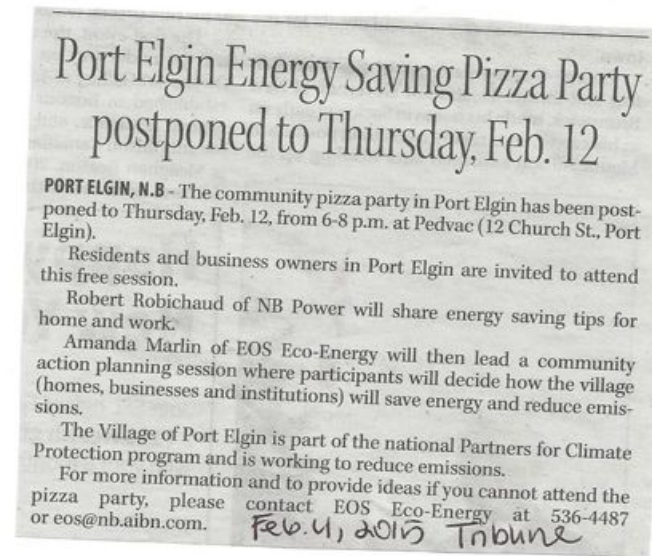
Residents and business owners in Port Elgin are invited to join Robert Robichaud of NB Power, Amanda Marlin of EOS Eco-Energy, and your local village council. Enjoy some pizza and hear about energy saving tips. Then help design Port Elgin's community action plan to save energy.

**Free to attend. Everyone in Port Elgin welcome!**  
For more info contact EOS at [eos@nb.aibn.com](mailto:eos@nb.aibn.com) or 506-536-4487  
[www.eosecoenergy.com](http://www.eosecoenergy.com)

**EOS** Eco-Energy Eco-énergie  
**PORT ELGIN** YOUR PLACE OR OURS  
**Énergie NB Power**  
**New Brunswick**

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Jan. 26, 2015 Tribune-Post



**Port Elgin Energy Saving Pizza Party  
postponed to Thursday, Feb. 12**

**PORT ELGIN, N.B.** - The community pizza party in Port Elgin has been postponed to Thursday, Feb. 12, from 6-8 p.m. at Pedvac (12 Church St., Port Elgin).

Residents and business owners in Port Elgin are invited to attend this free session.

Robert Robichaud of NB Power will share energy saving tips for home and work.

Amanda Marlin of EOS Eco-Energy will then lead a community action planning session where participants will decide how the village (homes, businesses and institutions) will save energy and reduce emissions.

The Village of Port Elgin is part of the national Partners for Climate Protection program and is working to reduce emissions.

For more information and to provide ideas if you cannot attend the pizza party, please contact EOS Eco-Energy at 536-4487 or [eos@nb.aibn.com](mailto:eos@nb.aibn.com).

Feb. 4, 2015 Tribune



## Appendix 2 – Port Elgin PCP Summary Handout for the Public



### Port Elgin: Partner for Climate Protection (PCP)

#### What is the PCP Program?

The PCP program is a network of municipal governments that have committed to reducing greenhouse gas emissions (GHG) and acting on climate change. It is a program of the Federation of Canadian Municipalities and part of an international initiative of the ICLEI (International Council for Local Environmental Initiatives).

There are five milestones to complete in order to reduce GHG emissions:

1. Create a GHG emissions inventory and forecast
2. Set an emissions reduction target
3. Develop a local action plan
4. Implement the plan and activities
5. Monitor progress and report results

#### Benefits of the program:

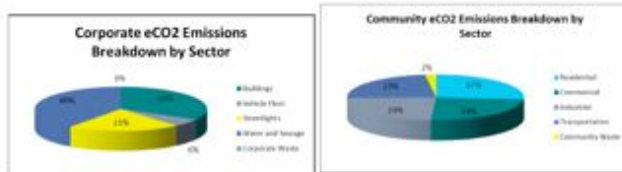
- Reduced emissions
- Cost savings (eg. lighting, heating, hybrid vehicles, etc)
- Job creation and local economic development (eg. Transit drivers, new markets for renewable energy, etc)
- Reduced traffic congestion (eg. new shuttle service, car sharing, etc)
- Improved air quality
- More environmentally friendly and liveable community

#### Where is Port Elgin at now?

The Village joined the PCP in 2009. Port Elgin has completed milestones 1 and 2 (emissions inventory and reduction targets). Milestone 1 involved an inventory of GHG emissions from both municipal operations (eg. Buildings, lighting, water treatment, waste water treatment, municipal vehicles, and solid waste) and the community (including institutions, businesses, industry, transportation and residential waste). EOS completed the work for the Village with a grant from the ETF (NB Environmental Trust Fund). The PCP work is also part of the Picture Port Elgin and Tantramar 2040 plans.

#### The result of the inventory was:

Municipal GHG emissions = 99 metric tonnes of carbon dioxide equivalent (t CO<sub>2</sub>e)  
Community GHG emissions = 6,069 t CO<sub>2</sub>e

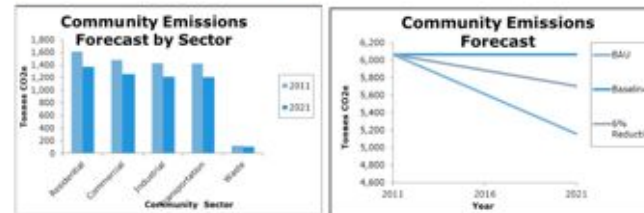


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#### Predicted Community Greenhouse Gas Emissions:



\*\* Note that the irregular decrease in emissions is due to forecasted population decreases.

#### Emissions Reduction Targets:

During winter 2014 the Village Council agreed to reduce emissions from municipal operations by 20% by 2021. The Council worked with EOS to gauge public acceptance to reduce community emissions by at least 6% by 2021. This equals a reduction of 364 t CO<sub>2</sub>e or less than 1 metric tonne of CO<sub>2</sub>e by 2021 per person. Participants in a community meeting supported the reduction target.

#### Next Step – Milestone 3:

Get in touch with EOS if you'd like to sit on the local committee that will design the emissions reduction plan, or if you'd like to be part of one of the planning sessions. The plan will only be successful if it has a range of input by local people.

#### Potential ways to Reach the Target:

- Other forms of common transportation (eg. Carshares, etc)
- Solar voltaic technology is decreasing in price, more uptake by homeowners within 10 years
- Solar hot water systems
- Energy efficiency campaigns
- Waste reduction campaigns
- Water conservation campaigns, rain barrels
- Energy efficient retrofits to more houses
- Purchase of Energy Star appliances

For more information and examples of PCP work from other communities across Canada, go to:

<http://www.fcm.ca/home/programs/partners-for-climate-protection.htm>

To get in touch with EOS: 536-4487 or eos@nb.aibn.com

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