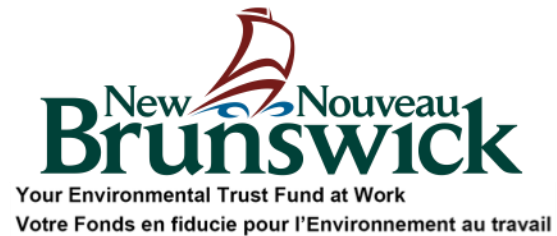


DORCHESTER

COMMUNITY ACTION PLAN UPDATE

MILESTONE 4

March 2020



Activity + Timeline	Partners and Resources	Estimated Emissions Reduction	Milestone 4 Updates
1. Public Education Campaign			
<p>Village staff will put energy saving tips in the Dorchester Community Newsletter (could be about appliances, heating, insulation, etc.).</p> <p>Town could also send additional informative flyers in the mail to all Dorchester addresses.</p> <p>Ongoing</p>	<p>Village staff and partners such as EOS Eco-Energy, NB Power, etc.</p> <p>None needed other than staff time add tips to existing monthly community newsletter.</p> <p>Funds needed for special mail-outs to Dorchester addresses. Cost per mail out is about \$75.</p>	<p>If local residents, businesses and institutions follow the tips and information provided and save energy then significant emissions can be reduced.</p>	<p>This has not been done.</p>
<p>Use local community radio to broadcast energy saving tips as well.</p> <p>Ongoing</p>	<p>Village staff, Tantramar Radio, etc.</p> <p>Time/volunteers to develop energy saving tips.</p>	<p>If local residents, businesses and institutions follow the tips and information provided and save energy then significant emissions can be reduced.</p>	<p>Every Wednesday on the Tantramar Radio, there is a highlight of Dorchester goings-on. No specific energy saving tips have been shared to the best of our knowledge.</p>

<p>Presentations on energy efficiency, heritage buildings and efficiency retrofits, energy conservation, etc.</p> <p>Ongoing</p>	<p>Village of Dorchester in partnership with EOS Eco-Energy, NB Power, Heritage Society, etc.</p> <p>Could be done for no cost depending on presenters chosen for events. Use municipally owned venue (Rec Centre, Dorchester Veterans Hall, etc.). Announce events for free in Dorchester Newsletter and on social media. If Village hires a project coordinator the cost could be \$5-10,000 for a series of presentations and community education events.</p>	<p>If local residents, businesses and institutions follow the tips and information provided and save energy then significant emissions can be reduced.</p>	<p>A living off the grid workshop was held in Dorchester in 2015 with more than 50 people in attendance.</p> <p>A workshop was held on how to save energy at home in partnership with NB Power.</p> <p>Draft-proofing workshop was held in 2019 in Station 8 House with volunteers from the Cross Cultural Youth Project.</p> <p>Other workshops in 2017-2018 included DIY Compost Bins, Zero Waste Living, a tour of Eco360 (local waste sorting facility).</p> <p>Summer 2019 featured the first Annual Sustainable Home Show in Sackville. Hosted by EOS it had 500 visitors from across the Maritimes. There were 25 vendors, a collection of EV's and their drivers and presentations on saving energy, solar energy, a local renewable energy co-op, etc.</p> <p>Two solar home tours have been offered with more planned. In 2019 60 people participated and visited three homes.</p> <p>Please see the EOS website for more details on projects and workshops: https://eosecoenergy.com/en/</p>
<p>Promote solar energy with workshop series, bulk purchase of solar panels and solar potential mapping for Dorchester 2015-2016.</p>	<p>EOS Eco-Energy</p> <p>EOS has applied for grants from Eco-Action, the Environmental Trust Fund and the Green Investment Fund</p>	<p>The average family of 4 in Canada 9600kwh of electricity annually. In New Brunswick this translates into 2,419kg of CO2. Thus, each house that switches to solar in Dorchester could save 2,419kg of CO2.</p>	<p>Solar potential mapping was done for Dorchester. Solar workshops and home tours have taken place including a very successful living off the grid workshop in 2015 in Dorchester. EOS has organized two solar bulk purchases (in 2015 and 2019) but no houses in Dorchester have taken part. More bulk deals are planned for the future, however.</p>

2. Residential Waste Reduction			
<p>The village office will implement the wet/dry garbage collection system for homes in Dorchester starting in May 2015. Guides will be available at village office, post office, etc. Compost bins will also be encouraged. Organize a community trip to Westmorland-Albert Solid Waste.</p> <p>Spring 2015</p>	<p>Village council and staff</p> <p>None needed other than staff time to educate residents on new garbage separation rules.</p>	<p>The wet/dry program recycles or composts 51% of residential waste collected (Westmorland-Albert Solid Waste) this means that half of the garbage currently collected in Dorchester will be kept out of the landfill and reduce related GHG gases.</p>	<p>The wet/dry system has been changed to a 3-stream system (garbage, recyclables, compost).</p> <p>The Village office, the Recreational Centre, and the Veterans Civic Centre are currently using the 3- stream waste program.</p> <p>The school wants to implement this system.</p>
3. Anti-Idling Policy			
<p>Village staff and partners will create an anti-idling policy, educate/raise awareness and enforce it.</p> <p>2017-2018</p>	<p>Village staff and council</p> <p>Staff time develop, implement, and enforce the policy. No additional costs unless permanent signage is erected in the village. Cost of signs could be \$100 to \$1000 depending on number and style. Fines for idling could help cover this cost.</p>	<p>If the average midsize car were to idle for an hour it would use 0.76L of gas. This translates to 1.8 kg of CO2 for every hour a car idles. In addition, for every two minutes a car idles it uses enough gas to travel about 1.5 km.</p>	<p>This was never done.</p>

4. Saving Water			
<p>Have EOS and Eco-Container Co. organize a DIY Rain Barrel workshop in Dorchester.</p> <p>Summer 2015 or summer 2016</p>	<p>EOS and Eco-Container Co. Possibly funding needed to cover expenses of speaker's time (\$200). Participant registration fees could help cover expenses such as venue, rain barrel materials and catering (about \$25 per person).</p>	<p>The average savings from a rain barrel is generally regarded as 4900L annual. Rain barrels have the potential to save Dorchester a lot of water and energy.</p>	<p>A rain barrel workshop was held in Dorchester at the Veteran's Community Centre. People learned how to make their own, different design options, and all participants went home with a 55-gallon food grade barrel. This was done in partnership with Eco Container Co from Dorchester. More residents are now saving water and energy with their own rain barrels.</p>
<p>Education campaign to reduce water use and conserve. Water and sewer accounts for the second largest percentage of municipal emissions in Dorchester. Municipal staff have already been active in trying to find and reduce the cost of the increased water use in the village. It is also noted that the Dorchester Penitentiary is a large use of water.</p> <p>Ongoing. Awareness of increased water use in the Village has been in the monthly village newsletters.</p>	<p>Village staff and council with community partners such as EOS Eco-Energy</p> <p>Some funding may be needed for literature, posters, mail-outs, etc. Each mailout to addresses in Dorchester is \$75.</p>	<p>If local residents, businesses and institutions follow the tips and information provided and save energy then significant emissions can be reduced.</p>	<p>A rain barrel workshop was held in Dorchester at the Veteran's Community Centre. People learned how to make their own, different design options, and all participants went home with a 55-gallon food grade barrel. This was done in partnership with Eco Container Co from Dorchester. More residents are now saving water and energy with their own rain barrels.</p> <p>EOS produced a brochure in 2014-2015 about water conservation and rain barrels. In summer 2014 EOS also planted two rain gardens in Dorchester to help reduce flood risk and help recharge ground water.</p>

5. Dorchester Penitentiary			
Village to meet with Dorchester Penitentiary representatives to develop a special energy reduction plan for the prison. It could involve use of existing wind turbine, compost program, water use, etc.) In the intermediate term.	Village staff and council in partnership with Corrections Canada/Dorchester Penitentiary None needed other than staff time.	Amount of savings will depend on commitment by Corrections Canada.	This has never been done.
6. Buy Local			
Local residents are organizing a farmer's market. It will offer local shopping and promote buying local. The ability to buy produce and other items in Dorchester will reduce the need to drive to Sackville or Moncton. Spring 2015	Farmers Market community group Volunteers, vendors, etc.	Driving less saves fuel which reduces emissions. One litre of gasoline emits 2.38kg of CO2.	There was a community farmers market for a year or so, but it no longer exists. There was a \$25,000 grant for seniors, to do with intergenerational learning. There is a community garden at the school, and seniors from the community, came to teach the students how to preserve and pickle vegetables from the garden. This was then sold at a farmer's market at the school, during a weekend in October 2019.

7. Community Rewards and Recognition			
<p>Encourage participation in the action plan to reduce emissions by having a year-long competition in Dorchester to save energy. The power customer that saves the largest percentage on his/her power bill over the course of one year will be rewarded with \$100 off their next power bill. Could use the Dorchester Village Newsletter to promote the program.</p> <p>2016</p>	<p>Village staff and community partners</p> <p>Funds to cover the recognition/reward (\$100/year). Could come from municipal savings. Village staff and council time to promote the community competition.</p>	<p>If local residents, businesses and institutions follow the tips and information provided and save energy then significant emissions can be reduced.</p>	<p>This has not existed during the last two years (October 2019)</p>

New Actions Since Milestone 3

Activity + Timeline	Partners and Resources	Estimated Emissions Reduction	Milestone 4 Updates
<p>Direct installations of energy saving items (high-efficiency shower heads, insulation pipe wrap and 20 LEDs per home) in 60 households in the Tantramar Region</p> <p>2016-2017</p>	<p>EOS Eco-Energy partnered with NB Power who provided free LEDs, pipe wrap and shower heads which EOS installed.</p>	<p>For 60 homes to get the direct install materials (an average of 20 led lights, 3 ft of wrap and 1 shower head) = 95.790 kWh and 24.139 kg/yr of emissions</p>	<p>LED light bulbs, high efficiency shower heads and hot water pipe wrap have been installed in 88 homes in the Tantramar region and counting.</p> <p>In year one of the program (2016-2017) EOS installed the retrofit items in 53 homes in the Tantramar region. For a total of over 32,000 kwh saved annually. This included 5 homes within the municipal boundary of Dorchester for an annual savings of 4242 kwh per year.</p> <p>In year two of the program (2017-2018) an additional 35 homes were visited by EOS staff and 21,079 kwh saved annually. Unfortunately, homes tracked by NB Power account number and so we are not sure which ones were located in Dorchester.</p> <p>In year three (2018-2019), one house in Dorchester took part in a retrofit and so reduced their electricity consumption by 84.6 kWh per year.</p> <p>In year four (2019-2020), 2 homes in Dorchester were visited, where retrofit items were either given or installed. This resulted in an annual savings of 2,196 kWh.</p> <p>The total emissions saved, during these 4 years, from retrofits, is 1,866.9 kg of CO2.</p>
<p>Draft-proofing parties will bring together community members with EnerGreen builders to improve the efficiency drafty homes, and everyone who attends the parties will learn how to upgrade the efficiency of their own home</p>	<p>EOS Eco-Energy partners with Joe Waugh Const. to deliver the parties and has had funding from Eco Action and WA Action</p>	<p>For the 6 parties, plus 12 guests that draft proof their homes too = 10,584kwh and 2667kg/year or emissions</p>	<p>Visit EOS's webpage on draft-proofing parties to learn more about the project (https://eosecoenergy.com/en/party/) and visit the EOS YouTube channel to see a video about the parties (https://www.youtube.com/watch?v=HfGgw6_6NTY&t=129s).</p> <p>From 2016 to 2019: 48 metric tonnes of emissions have been saved because of the project and 27 buildings have been draft-proofed.</p> <p>4 of the buildings have been in Dorchester so far.</p> <p>As of spring 2019 emissions saved as a result of parties in Dorchester equals 3.69 tonnes (annually) and counting.</p> <p>Although there were 2 additional draft proofing parties in Dorchester as of February 2020, we cannot report on any reduction in emissions because of the fully operating wood-fire furnace in the first house</p>

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2016-2017			when we arrived, and because the second house needed extensive draft proofing, and it would not have made sense for us to do work there.