

GREEN MUNICIPAL FUND (GMF)

Study no.: 9525

Schedule A

Final Report

January 20, 2009

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	Energy Services	What was accomplished
1.	Plan for the retrofit of Town Hall for greater energy efficiency	It was determined by an engineering firm that the Town Hall building would not be a suitable candidate for geothermal ¹ . As a result, the solution lies in energy conservation measures such as new windows for the entire building, brick repointing, moderation of temperature and sealing all cracks and leaks.
2.	Complete PCP program Milestone 1 (creating GHG emission inventory and forecast) and make progress on Milestone 2 (setting an emissions reduction target)	Milestone 1 was achieved in November 2008. ² Emission targets have yet to be set.
3.	Develop energy efficiency plan for other existing Town-owned buildings	<p>All of the upstairs windows at King's Theatre have been replaced with more efficient double glazed vinyl windows. Only areas in use are being heated. Staff and volunteers have made a habit of going around each night to ensure that all computer and photocopiers are turned off and that all electrical appliances not in use are turned off and unplugged.</p> <p>Fire Department:</p> <ol style="list-style-type: none"> 1) New energy efficient furnaces being installed with 30% to 50% in savings. 2) New Exit and Emergency lighting 80% more efficient, mostly all replaced now. 3) 3/4 of old windows will be replaced by April 2009, the rest in early summer on truck bay side. 4) Insulating of all heating pipes in truck bay area, being done now. 5) New fans being installed during grant phase³; as doors open fans come on and push hot air back down to floor area

¹ Hatch Mott MacDonald report, November 13, 2008 (Tab 15)

² FCM website (Tab 21)

³ The grant referred to here is the First Responder Program, Province of Nova Scotia

		<p>6) Reducing heat settings throughout the hall (ongoing campaign for the past 3 years).</p> <p>7) Replacing existing lighting in truck bay area with all energy efficient bulbs during grant phase.</p> <p>8) Turning off of major appliances after events. (ie. fridges, stoves, dishwasher, etc.)</p> <p>9) Less water consumption by repairing and replacing leaking and outdated plumbing amenities. The Department's water bill is now about 1/3 of what it used to be.</p> <p>10) Trying to reduce fuel consumption in vehicles, but that is difficult depending on call ratios per month (ongoing).</p> <p>11) Installed new front service entrance door in truck bay last summer as old one was in bad shape. June 2008</p> <p>12) Had Peck's Auto replace all weather stripping around banquet hall double entrance doors. July 2008</p> <p>13) Repainting and refurbishing of truck bay area, insulation replaced and all holes and penetrations were repaired when the truck bay was done in Oct./ Nov 2008.</p> <p>14) New energy efficient lighting for Banquet Hall in 2007 when new ceiling tiles were replaced.</p> <p>It has been determined that nothing can be done with the existing Public Works building and that a new building is required.</p>
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4.	Review technological options and recommend direction for new energy efficient Public Works building and new outdoor public pool and bath house	<p>Plans were developed by Hatch Mott MacDonald for a new Public Works building including a geothermal hot air exchanger, an in floor heating system and R20 insulation.</p> <p>During the course of this project, the Friends of the Pool Society formed and took over responsibility for building and maintaining a new community pool.</p> <p>The project has the following features:</p> <ul style="list-style-type: none"> • toilets are low flow 6l flush • Shower heads are low flow • 60 gallon r-12 electric water heater (turned down thermostat) • most (if not all) lights in buildings are compact fluorescents • outdoor entry light is set on a seasonal timer that controls lighting requirements depending on time of year • outdoor security light is on a motion sensor • venting windows to cool building instead of air conditioner • vented soffit to help cool building and make roof last longer • chemical controller which automatically maintains pool chemicals that are required for optimum efficiency • liquid Leveler valve that controls optimum pool water height (don't over fill pool and use more chemicals than required) • splash pad is piped so that it runs back into the pool and the water is recycled. • splash pad pump is controlled separately from the pool so that it doesn't always run, only when needed • commercial grade 220v pump motors, new and as efficient as possible • vinyl sided buildings to minimize annual maintenance. • re-furbished and recycled old change house
5.	Explore the potential use of fuel cell technology to heat public and other buildings	Our partner for this part of the project, NSPI, failed to complete the work.

6.	Plan for implementing conservation measures, and researching the use of renewable energy technologies for the Town's heritage buildings (largest concentration in the Province of Nova Scotia per capita)	See recommendation 10.
7.	Review options for tidal power use	Our partner for this part of the project, NSPI, failed to complete the work.
8.	Consider the use of light emitting diode (LED) lights as a provincial pilot project to convert street lights to LED	Conversion to LED street lights is scheduled to proceed in February and March 2009, depending on the weather. After on-street testing, the anticipated energy savings is 52% compared to the 100w High Pressure Sodium (HPS) equivalent. In dollar amounts, it is estimated that over the 20 year life of the lamps, the Town will save approximately \$3,620.00 per fixture. Our current application is to replace 121 fixtures in 2009. ⁴
9.	Review the use of EnerGuide, Energy Star and CanMOST for incorporation into the Town's purchasing policy	See recommendation 3 and Tab 5.
10.	Consider policy changes, such as changing the existing planning standards to reflect a strategy for climate change	See recommendations 8, 9, 12, 13, 14, 15 and 16.
11.	Incorporate the existing public education strategy to reduce unnecessary idling of vehicles	See recommendation 1

⁴ Letter from Nova Scotia Power dated August 26, 2008 re LED Roadway Lighting product

	Water Services	What was accomplished
1.	Consider bylaw to require low flush toilets for all new construction/replacements	See recommendation 4
2.	Review Canada Mortgage and Housing Corporation's document entitled "Household Guide to Water Efficiency" and consider providing to all Water Utility clients	The material was reviewed and it was decided that Recommendation 4 would cover this.
3.	Develop strategy to encourage residents and businesses to conserve water	See recommendation 4

	Waste Management	What was accomplished
1.	Plan for enhancements to the existing Zero Waste Program (to go beyond current achievement of 60% diversion rate)	The Town implemented a Clear Bag Program on April 1, 2008 with a grace period and enforced from July 1, 2008. The bag limit for recyclables was increased with unlimited recyclables to a maximum of seven bags in total. The Town also instituted a small battery drop off at Town Hall and a car battery and fluorescent light tube drop off at the Public Works yard. The Friends of the Pool Society launched an ink cartridge fundraising campaign that encourages everyone to recycle their ink cartridges by dropping them off to FAPS in an attempt to raise funds for the pool. The Town also hosted the Christmas light exchange program again for the 4 th year in a row which encourages people to hang on to their old Christmas light sets and exchange them for new energy efficient lights rather than simply toss them in the trash. It is estimated that these changes have resulted in another 13% diversion which would bring the Town's diversion rate to 73%.

2.	Develop a computer equipment disposal policy	In 2008, the Province introduced a new computer equipment disposal policy for the entire Province.
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	Sustainable Community Development	What was accomplished
1.	Inventory Brownfields and review remedial options to accommodate redevelopment in the Town's core	The inventory is complete. FOIPOP request were made for 12 suspected brownfields. Three of these requests resulted in a positive identification of the brownfield in question. A Phase 1 and Phase 2 environmental assessment was carried out on one property that belongs to the Town.
2.	Identify plan to achieve Partners for Climate Protection (PCP) Milestones	The Town achieved Milestone 1 in November 2008 and is now developing the plan for Milestone 2.
3.	Implement a population growth strategy which includes the development of a dwelling units per hectare policy	See recommendations 24 and 25.