



PO Box 1749
Halifax, Nova Scotia
B3J 3A5, Canada

Item No. 10.1.11
Halifax Regional Council
January 26, 2010

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

A handwritten signature in dark ink, appearing to read "Dan English".

Dan English, Chief Administrative Officer

A handwritten signature in dark ink, appearing to read "Wayne Anstey".

Wayne Anstey, Deputy Chief Administrative Officer - Operations

DATE: 8 January 2010

SUBJECT: Eco Trust Applications, January 31, and Final Deadline

ORIGIN

This report originates from Staff.

RECOMMENDATION

It is recommended that Halifax Regional Council approve the staff applications for January 31, 2010 to the Eco Trust for the following projects:

- a. Green Thermal Utility Project
- b. Metro Transit Bus Fleet Fuel Efficiency project
- c. Electric Vehicle Infrastructure Assessment and Test Sites
- d. Community Energy / Sustainability Map

BACKGROUND

In 2007, the Government of Canada provided the Province of Nova Scotia \$42.5 million which has funded the Municipal and Environmental Technology Programs which have built capacity and enabled delivery of Clean Air and Climate Change Projects.

Halifax Regional Municipality has been very successful at delivering projects with Eco Trust funding support. These projects include:

- Sackville Sports Stadium Energy Efficiency Project
- Metro Transit (200 Ilesley) Phase Two Energy Performance Contract
- Centennial Pool Solar Hot Water Project
- Woodside Fire Station #15 Full natural gas conversion: new boiler, indirect hot water tank
- King Street Fire Station #13 Full natural gas conversion with new boiler, hot water tank
- Highfield Park Fire Station #12 Full natural gas conversion, new burners for the boilers
- Waverley Fire Station #41 New windows, more insulation and a lighting upgrade
- Lake Echo Fire Station #21 New oil boiler, new HVAC controls, new windows, lighting upgrade
- Ostrea Lake Fire Station 25 New windows, insulation and lighting upgrade
- Sheet Harbour Fire Station #28 New oil boiler, new HVAC controls, a lighting upgrade
- Mid-Musquodoboit Fire Station 38 New windows, insulation and lighting upgrade
- Halifax Police Headquarters Energy Efficiency and Gas Conversion Project
- Halifax City Hall Energy Efficiency Project
- Public Gardens Greenhouses Gas Conversion Project

January 31st, 2010 is the deadline for the last applications for the program. HRM staff has prepared five applications for this final 50% cost sharing opportunity. The LED Street Light Replacement Project application is submitted as a separate report.

DISCUSSION

An overview of the projects HRM is submitting applications for is as follows:

Green Thermal Utility

The green thermal utility project will connect district energy in two locations: Downtown Dartmouth, from Alderney Complex to Queens Square and Bedford, from the Waste Water Treatment Facility to a new development there. This project is described in the January 22 Energy and Underground Services Report.

Metro Transit Fleet Fuel Efficiency Project

The intent of this project is to catalyze a Fuel Efficiency program by installing up to 8 miniHybrid Retrofit Kits that will see savings fund future Fleet Fuel Efficiency Projects. Savings

from the Fuel Efficiency Projects will be put in the Energy and Underground Services Reserve Q1312 for Energy Efficiency Projects as per previous council direction on energy efficiency project. As per the January 12th Sole Source Award report, the project is anticipated to achieve a 10% fuel savings, which over a 10 year period will have the following impact:

Year	Retrofit Kits Installed	Fuel Savings	Fuel Savings	GHG Reductions	Fuel Savings
	Quantity	litres	dollars	annual	PiggyBank
			65 c per litre		
2010	8	30400	C\$19,760.00	81.76	C\$19,760.00
2011	0	30400	C\$19,760.00	81.76	C\$39,520.00
2012	1	34200	C\$22,230.00	91.98	C\$34,755.03
2013	1	38000	C\$24,700.00	102.2	C\$32,460.06
2014	1	41800	C\$27,170.00	112.42	C\$32,635.09
2015	1	45600	C\$29,640.00	122.64	C\$35,280.12
2016	1	49400	C\$32,110.00	132.86	C\$40,395.15
2017	1	53200	C\$34,580.00	143.08	C\$47,980.18
2018	1	57000	C\$37,050.00	153.3	C\$58,035.21
2019	2	64600	C\$41,990.00	173.74	C\$46,035.27
Total	17	444600	C\$288,990.00		
End Balance					

Note: This schedule is based on using the miniHybrid solution. Future purchases (2011 and onwards) will consider other alternative fleet fuel efficiency opportunities that meet or exceed the performance of this initial solution. The intent of this schedule is to show the capacity that 8 initial kits can have over 10 years.

Electric Vehicle Infrastructure Assessment and Test Sites

Electric vehicles are coming. Municipalities across North America are getting ready for this and preparing to seize the opportunity this brings. Both Toronto and Vancouver have initiated projects to prepare for Electric Vehicles, this project would ensure HRM is prepared when the opportunity arises.

In order to meet the demand in the near future, HRM staff are recommending to put in test sites at three locations, Alderney Complex, Bedford 4 Pad Arena and Canada Games Centre. In addition to the test sites, staff will contract with a consultant to perform the following scope of work:

- assessment of regulations (MGA, HRM Charter, Building Code, etc)
- Community and Corporate Infrastructure Assessment (where needed)
- Integration with corporate fleet requirements
- Policy assessment to align with Community Energy Plan, GHG Emissions Reduction

Council Report

Plan, Economic Development Strategy, etc.

Potential opportunities related to Electric Vehicles and having a well planned smart charging system include being able to procure energy at low demand times, return energy at high demand time to balance the grid. In addition, with Charging Stations, HRM will have the opportunity for a revenue source to sell electricity to electric vehicles at public facilities.

Community Energy / Sustainability Map

In order to build community capacity around energy, renewable energy and sustainability actions, HRM will put the start up effort into a Community Energy / Sustainability Map that will be hosted on the Internet. Very comparable to <http://energymap.dk> or oregon.energymap.com the HRM Energy Map will enhance community capacity around Energy Efficiency and Sustainability actions in the municipality. The HRM and Province cost sharing will initiate the set up of this project and enable transition to maintenance and operation by other local environmental groups and partnerships. This effort will assist local Green Businesses to come to market and offer their goods and services to the community. This map will enable HRM to showcase the successful sustainability projects completed in the municipality, both corporately and in the community to a wide variety of interested parties: including attendees of the 2011 Federation of Canadian Municipalities Conference, local public - both business and personal, and other municipalities and provinces.

A summary of the project costs is as follows:

Project	Total Project	Eco Trust Request	HRM Funding	HRM Funding Source	Impact on future operating budgets
Green Thermal Utility	\$4.5 Million	\$2.25 Million	\$2.25 Million	As per Energy and Underground Services Report	New Revenue Stream
Metro Transit Fleet Fuel Efficiency	\$215,959.76	\$107,979.88	\$107,979.88	<ul style="list-style-type: none"> CTI00695 Sustainable Communities Reserve Q127 in 10 / 11 Capital Budget 	<ul style="list-style-type: none"> reduced fuel costs reduced maintenance costs Fuel Savings to generate financial capacity for future Fleet Fuel Initiatives
Electric Vehicle Infrastructure Assessment Plan and Test Sites	\$150,000	\$75,000	\$75,000	<ul style="list-style-type: none"> Within existing Capital Project Budgets for 4 Pad Arena and Canada Games Centre and Building Upgrades 	<ul style="list-style-type: none"> This is capacity building only, assessment on EV's will come at a future date Potential Revenue Source
Community Energy / Sustainability Map	\$200,000	\$100,000	\$50,000	<ul style="list-style-type: none"> \$50,000 from other stakeholders Q131, Energy Efficiency Reserve in 10 / 11 Capital Budget 	<ul style="list-style-type: none"> None, after funding and solicitation, maintenance and operation to be external

In addition, as noted above, as described in the separate Recommendation Report LED Street Light Replacement Project, the LED Street Light Replacement Project will replace 2008 streetlights in the municipality with energy efficient LED Streetlights. Energy savings from this project will replenish the Energy and Underground Services Reserve Q131 for future Energy Efficiency Projects. Project cost particulars are in the separate report.

In the event there are insufficient moneys available from the Provincial Program to fund all of the applications submitted, staff have communicated to the Province that the Green Thermal Utility Project and the LED Street Light Replacement Project would have the highest priority for HRM, following which the other projects applied for would have priority in the order they are listed in

this report.

BUDGET IMPLICATIONS

There are no budget implications with the recommendations in this report. All 09/10 costs are accounted for within the existing current year budgets. Approval for future year costs will be submitted either through the annual budget process or through a separate Council Report as appropriate.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES


Council could wish to not endorse staff applications for these projects.

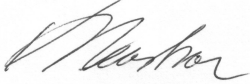
ATTACHMENT

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Richard MacLellan, Acting Manager, Sustainable Environment Management Office, 490-6056
Julian Boyle, Energy Auditor, 476-8075

Financial Approval by: 
Cathie O'Toole, CGA, Director of Finance, 490-6308

Report Approved by: 
Phillip Townsend, Director, Infrastructure and Asset Management

Report Approved by: 
Ken Reashor, P.Eng., Acting Director, Transportation and Public Works