

TO:	GENERAL COMMITTEE
SUBJECT:	DEVELOPMENT OF SUSTAINABILITY PLAN
WARD:	ALL
PREPARED BY AND KEY CONTACT:	B. THOMPSON MANAGER OF ENERGY Ext. 4557
SUBMITTED BY:	R. PEWS, P. ENG., DIRECTOR OF CORPORATE FACILITIES
GENERAL MANAGER APPROVAL:	D. MCALPINE, GENERAL MANAGER OF COMMUNITY AND CORPORATE SERVICES
CHIEF ADMINISTRATIVE OFFICER APPROVAL:	M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

- 1. That capital project "Community Wide Green House Gas Inventory Development" be established with a total budget of \$180,000, to be funded from Federal Gas Tax funds.
- 2. That should the capital project "Community Wide Green House Gas Inventory Development" be successful in obtaining provincial funding from the Municipal Energy Plan Program, the City Clerk be authorized to execute any agreements or documents that may be requisite and the Director of Finance or his/her designate be authorized to adjust the budgeted funding source accordingly.
- 3. That staff provide a memorandum identifying whether the funding applications for the Provincial Green House Gas Challenge Fund were successful.

PURPOSE & BACKGROUND

Report Overview

- 4. Provincial and Federal governments have made commitments to Greenhouse Gas (GHG) reduction that will require participation of other levels of government in order to meet their objectives.
- 5. In order to encourage participation by municipalities both Provincial and Federal governments have created funding programs for municipalities to access to complete GHG reduction projects.
- 6. Both levels of government require municipalities to establish Community Green House Gas reduction plans in order to access funding.
- 7. Although there are slight differences in the requirements for what a community Green House Gas reduction plan consists of from the two upper levels of government, essentially, municipalities must collect a GHG emissions inventory for the entire community, targets for reduction (Province would like targets to match Provincial targets but not required) and an implementation plan including a time table to reach those targets.
- 8. In the initial Provincial program, The Municipal GHG Challenge Fund offered funding of up to \$10 million and up to 100% funding for projects.



- 9. The Federal Program 'The Municipal Green Funds Program" is delivered through the Federation of Canadian Municipalities, and although there are many funding streams, some with different requirements, most require municipalities to have community wide GHG inventories, GHG targets and plans for reduction that are council endorsed.
- 10. The City of Barrie has applied for two projects under the Provincial Government's Municipal Green House Gas Challenge Fund:
 - Sludge thickening project, will reduce number of trucks traveling between WwTF and Oro sludge facility, ask \$400,000
 - The Barrie-Simcoe Emergency Services Campus building project, based on the energy efficiency features of the new building, ask \$4,500,000
- 11. Should the City be successful in either/both applications, Council must commit, through a resolution, to completing a community-wide GHG inventory, development of reduction targets and an implementation plan within eighteen months. The Council resolution must occur prior to the transfer payment agreement being completed.

ANALYSIS

- 12. Up to half of Canada's GHG emissions are under the direct or indirect control or influence of municipal governments, therefore both the Federal and Provincial governments require participation of municipal governments in order to meet targets they have established for the reduction of GHG emissions.
- 13. GHG reduction projects are similar in nature to energy conservation projects yet there are differences. While the goal of energy conservation projects is energy use reduction, and energy use reduction always results in GHG reduction, each particular energy source has a different impact on the quantity of greenhouse gasses released. The focus of City's current Energy Management Plan is, in general, on projects and initiatives which reduce electrical energy use, as this use represents 80% of the City's utility costs. However, with coal-fired electricity generating plants now closed across the province Ontario's electrical system is now relatively low in GHG emissions, meaning that GHG reduction plans must look beyond electricity consumption.
- 14. If the Corporation wishes to pursue a GHG reduction strategy, evaluation of energy projects prior to implementation should include GHG reduction potential as well as economic analysis to ensure there is some weighting given to GHG reduction.
- 15. The City completed an Integrated Energy Mapping Strategy exercise in 2011 that could be used as the basis to upgrade the plan. The data used for this project was 2009 data and made assumptions based on Provincial population estimates out to 2031.
- 16. That project made broad recommendations and quantified the 2031 emissions estimate including Provincial growth estimates, the reduction necessary and estimated cost (based on an assumed average cost per tonne of GHG emission reduction) to maintain emissions at current levels. It did not develop a detailed implementation plan to achieve this.
- 17. Going forward there will be some synergies gained from the plan developed in 2011, however, updating the GHG inventory and developing detailed targets with a costing and implementation plan will be a much more detailed exercise than simply updating the old plan with new data.
- 18. The Province offers specific funding for completing plans such as this, offering up to \$90,000 or 50% of costs for a new plan or 50% of costs, up to \$25,000, to continue work on an existing plan.



- 19. Staff believe applying for funding for a new plan will be more beneficial than trying to update the existing document.
- 20. The new document will also determine resourcing requirements necessary to implement the plan.

ENVIRONMENTAL MATTERS

21. By developing a community wide GHG reduction plan, the City is quantifying the impact on climate change by the City of Barrie. This then allows for a targeted implementation plan to reduce GHG emissions.

ALTERNATIVES

- 22. The following alternatives are available for consideration by General Committee:
 - Alternative #1 General Committee could choose to not develop a plan that includes a GHG inventory for the entire community, targets for reduction of GHG and an implementation plan to achieve the targets.

This alternative is not recommended as it is a requirement for the existing grant applications under the Provincial Municipal GHG Challenge Fund and likely to be required for future funding initiatives from both Federal and Provincial Governments

Alternative
#2General Committee could choose to expand upon the Integrated Energy
Strategy Mapping project completed in 2011.

This alternative is not recommended as the cost to develop an acceptable GHG Reduction Plan necessary to secure project grant funding would not be cost-effective for the city.

FINANCIAL

- 23. The recommendation does not result in an immediate operating impact. Until the Plan is completed and recommendations known, future resource requirements remain unknown.
- 24. The following Capital impacts have been identified:
 - a) The request is for \$180K of new capital dollars to be funded from Federal Gas Tax Reserves. There is high probability that 50% of project costs (or \$90K) would be offset by provincial GHG funding.
 - b) Should this project not be approved, potential funding from Municipal Greenhouse Gas Challenge funding of \$4.5M & \$400K (for the Emergency Services Campus and Sludge Thickening projects respectively) would not be approved by the Province, as the Provincial Greenhouse Gas Challenge Program funding grants are conditional upon Councilapproved intent to implement the program. Both projects have approved funding and if successful in obtaining grant funding it will be used to offset the costs of these capital projects.



LINKAGE TO 2014-2018 STRATEGIC PLAN

- 25. The recommendation included in this Staff Report support the following goals identified in the 2014-2018 Strategic Plan:
 - Inclusive Community
 - Responsible Spending
- 26. As identified in the Municipal Energy Plan Program guidelines manual, a well-developed Plan provides key energy use information and identifies a broad range of energy conservation opportunities that can help local governments in their long-term decision-making and planning for future developments.
- 27. The Municipal Energy Plan Program requires a stakeholder consultation phase which will include utilities, school boards interested public etc. which will make the plan a community document.
- 28. By implementing this program the municipality will become eligible to receive grant funding to offset costs associated with any projects that are implemented.