

ENVIRONMENT COMMITTEE MAY 25, 2010

MEASURING ENVIRONMENTAL SUSTAINABILITY PERFORMANCE OF DEVELOPMENT – PROGRESS UPDATE FILE 22.24.1

Recommendation

That the Commissioner of Planning, in consultation with the Commissioner of Finance and City Treasurer, recommends:

1. That the presentation by the Policy Planning Department titled, "Measuring Environmental Sustainability Performance of Development – Progress Update", and attached report be received; and
2. Following the Federation of Canadian Municipalities' (FCM) acceptance of the Letter of Intent to Apply and subsequent invitation to proceed with the development of a Detailed Application to the Green Municipal Fund (GMF), staff and partners will commence the process of preparing a detailed project plan in accordance with the Grant Funding Procurement Policy and inclusion in the 2011 budget deliberations for Council approval.

Contribution to Sustainability

The initiatives outlined in the presentation support the priorities previously set by Council in Green Directions Vaughan, the City's Community Sustainability and Environmental Master Plan. Specifically, Objective 2.3 speaks to creating a city with sustainable built form. Action Item 2.3.1 refers to developing criteria to measure sustainability performance of development, specifically to develop "sustainable development evaluation criteria, supported by provisions in Bill 51 and Places to Grow, that can be applied from neighbourhoods to sites and include these five areas: (1) development form/sustainable sites; (2) resource efficiency; (3) transportation; (4) public realm; and (5) greenspace and wildlife."

Economic Impact

FCM requires projects, proposed as partnerships, to identify one of the partners as the 'lead' for the purposes of the application process. Further, the lead partner must commit in writing to providing a minimum cash contribution of 10% of the total eligible costs. The City of Vaughan will act as the 'lead' applicant on the proposed project as agreed to by all partners. As such, the City will be responsible for providing a minimum of \$18,000 (the 10% cash contribution) funded from Policy Planning's 2010 Operating Budget, 'Professional Fees' account to satisfy the required commitment under the FCM program. The City of Vaughan total cost under the proposed sharing arrangement with municipal partners is \$20,000 of the total project cost estimated to be \$180,000. The proposed project will move forward for inclusion in the 2011 budget discussions subject to approval of the detailed proposal from FCM. Committing the 2010 funding will ensure sufficient funds are available and the proposed project will meet all the requirements of the Grant Procurement Policy should FCM approve funding in early 2011. Further, the 2011 budget proposal will identify any additional project costs which may be required for the project's implementation in 2011.

Communications Plan

A communications plan is outlined as part of the larger project, but is not applicable for this report.

Purpose

The purpose of this report is to provide Council with an update on progress to implement Action Item 2.3.1 of Green Directions Vaughan regarding sustainability criteria and performance standards as part of site plan and Plan of Subdivision review. This report describes background research towards development of sustainability performance measures and actions to secure external funding for the project.

Background - Analysis and Options

Previous Action

On February 24th, 2009, the Report to Council titled, Measuring Environmental Sustainability Performance of Development, was presented to the Environment Committee. The following recommendations were put forward in the February 24th, 2009 Report:

"The City Manager, Commissioner of Planning and Director of Policy Planning in consultation with the Director of Reserves and Investments recommends:

- 1) That Council endorse the development of a framework to measure and promote sustainability performance of development through the application process, currently to be titled Sustainable Development Evaluation; and
- 2) That Council adopt in principle the work plan presented in this report to be used as the basis for developing proposals to seek external funds to carry out the work plan; and,
- 3) That a capital project entitled "Measuring Environmental Sustainability Performance of Development" in the amount of \$80,000 be forwarded to the Budget Committee to be included for consideration in the 2009 Capital Budget and funded from external funding sources."

The main recommendation of the Report to Council was to obtain Council endorsement of the project and proposed work plan to be used to develop proposals to seek external funding. Since that time, Council adopted Green Directions Vaughan, the City's Community Sustainability and Environmental Master Plan, with a specific action item (Action Item 2.3.1) to develop and implement sustainability criteria in the development review process.

City of Vaughan Policy Context

The new City-wide Official Plan, currently in development, includes two policy directions related to identifying and implementing criteria to measure the sustainability performance of development. First, the draft City-wide Official Plan includes a policy statement to undertake the development of a comprehensive set of urban design guidelines. Testing sustainable development measures is directly related to issues often addressed in urban design guidelines, such as pedestrian-friendly, transit-oriented, and resource efficient buildings and neighbourhoods. Second, the draft City-wide Official Plan includes a policy statement regarding green development standards, which is directly related to the initiative described in this report.

The Planning Department also recently presented a Report to Council (Item 16, Report No. 54, Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on December 14, 2009) to implement a complete application process according to the Planning and Conservation Land Statute Amendment Act (Bill 51). Urban Design & Sustainable Design Guidelines and an Urban Design & Sustainable Design Brief are noted as part of the complete application process. The exact names and definitions for the guidelines and submittal

requirements will be finalized following either the testing of sustainability performance measures or adoption of the new City-wide Official Plan.

Progress Update

1. Background Research

While fundraising efforts have been underway, staff has developed a preliminary framework of sustainability metrics. By September 2009, background research was completed based on sustainable development guidelines in other municipalities and metrics in existing third-party certification systems, such as in LEED™ and Green Globes. A preliminary framework has been developed recognizing performance increments for each sustainability measure that is also cross-referenced to existing sustainability guidelines. For measures relating to pedestrian movement and greenspace, new metrics are identified that will require testing and peer review. Measures and indicators relating to urban design, such as site planning, built form and public realm, were not considered part of the background research at this time as these matters are being addressed through the Official Plan review process. Urban design criteria will be incorporated in later phases of the work. Sustainability metrics have been compiled and organized into the following areas consistent with the structure of Green Directions Vaughan. For each measure listed below, a base case or required performance metric is identified and several enhanced performance metrics. For building energy efficiency, for example, the required performance target is 25% greater energy efficiency than the Model National Energy Code for Buildings (MNECB). This is consistent with the policies in the Region of York Official Plan (2009). Enhanced performance increments recognize 40% greater energy efficiency than MNECB, 60% greater energy efficiency than MNECB, and Net Zero Buildings (Net Zero Energy Home Coalition, <http://www.netzeroenergyhome.ca/>). The following is an outline of the content of the proposed framework.

What we use (Resource Conservation)

- Passive Solar Design
 - Building and Development Orientation
 - Maximizing Opportunities for Solar Gain
 - Daylighting
- Energy Conservation
 - On-Site Renewable Energy
 - Building Efficiency
- Urban Heat Island Effect
 - Roof Areas
 - Non-roof Hardscape Areas
- Water Conservation
 - Stormwater Management
 - Reduced Potable Water Use
- Waste Reduction
 - Divert Construction Materials from Landfills
 - Local and Sustainable Materials
 - Reclaimed and Recycled Materials

How we grow (Greenspace and Greenscapes)

- Greenspace Net Gain
 - Areal Extent
 - Greenspace Quality
 - Enhanced Riparian Buffer

- Greenscapes
 - Existing Healthy Soils
 - Restore or Enhance Soils
 - Topography and Landform Conservation
 - Net Gain of Plant Biomass

How we get around (Mobility)

- Pedestrian Amenities
 - Traffic Calming in Residential Neighbourhoods
 - Visible Pedestrian Crossings
 - Walkability/Neighbourhood Accessibility
 - Pedestrian-Oriented Facades
- Pedestrian Permeability and Connections
 - External Connectivity
 - Intersection Density
 - Intersection Frequency
- Cycling
 - Bicycle Network
 - Bicycle Parking

2. Funding

The February 24th, 2009 Report to Council titled, Measuring Environmental Sustainability Performance of Development, included a proposed work plan and budget for research and development, consultation and a final report outlining sustainability performance criteria. Following Council adoption of the February 24th, 2009 Report to Council, City staff collaborated with the Clean Air Partnership, the Toronto and Region Conservation Authority (TRCA), and Ontario Nature to submit a Letter of Intent in March 2009 to the Max Bell Foundation for funds to implement the proposed work plan. As the Max Bell Foundation is a private foundation, the collaboration was structured so that the Clean Air Partnership was the lead partner and would receive any potential funds. The City and partners would have been the beneficiaries of the project deliverables, including broad consultation on sustainability performance criteria and a final report outlining sustainability metrics.

The funding request was not approved by the Max Bell Foundation. Hence, in September 2009, the partners redesigned the project to meet the requirements of a field test under the Federation of Canadian Municipalities (FCM) Green Municipal Funds program. To meet the FCM requirements, the City of Vaughan was identified as the lead applicant. Neighbouring local and regional municipalities were approached to collaborate on the proposal. By January 2010, the Town of Richmond Hill and the City of Brampton agreed to be municipal partners. City of Vaughan staff in the Department of Reserves and Investments responsible for the City's Grant Funding Procurement Policy were consulted during the development of the Intent to Apply letter to FCM. An Intent to Apply letter was submitted to FCM on February 10th, 2010, with the total project cost estimated to be \$180,000 comprising \$90,000 in funds from the municipal partners (\$50,000 from Brampton, \$20,000 from Richmond Hill and \$20,000 from Vaughan) and \$90,000 matching funds from FCM. The Clean Air Partnership is identified as a non-government organization (NGO) partner and the TRCA as a regional partner that provide outreach and peer review.

The City of Vaughan received a reply from FCM on March 5th, 2010 requesting further clarification in order to approve the Intent to Apply letter and before requesting the submission of a detailed proposal. Three of the issues are administrative and easily clarified in a revised Intent to Apply letter. The issue regarding baselines and forecasted amounts for specific sectors, such as energy and water, and articulated in the third bullet in the response from FCM, requires that we agree with FCM on a proposed approach. It is the opinion of the municipal partners that the baseline calculations be included in the detailed proposal rather than in the Intent to Apply letter.

The municipal partners prefer that the forecasted amounts be part of the subsequent study to determine appropriate performance increments rather than being inserted in the detailed proposal in advance of appropriate study. The correspondence from FCM is as follows:

- “The description of the proposed activities puts this intent more in line with a feasibility study instead of a field test.”
- “We wanted to confirm that the contributing partners will not be implementing partners (i.e. they will not receive payment from the proposed study budget to conduct activities). We also wanted to ensure that as the lead municipality, the City of Vaughan will be contributing 10% of the total eligible costs in cash.”
- “Question A.11 Selection of Sector: It is understood that there will be multiple metrics covering energy, water, transportation and waste as a part of this study. However, in the course of the detailed part B application those metrics will need to be quantified in terms of a baseline and project amounts. So in order to quantify the environmental impacts you should be able to consider the existing targets as noted in municipal documents (as the baseline) and establish the forecasted amounts based on projected population increases and planned developments in order to quantify the impacts of shifts in development approvals.”
- “Outcomes of the feasibility study: It is expected that the results of the feasibility study while not being sector specific, will result in some form of documentation that will lead to changes in policy or operations at the municipal level (e.g. by-laws). This is alluded to in the reference of the report to councils that will be developed under Task 4 in A.15. But how will those reports be used to lead to changes in policy?”

A revised Intent to Apply letter was submitted on April 21, 2010. A positive response was received from FCM on May 14, 2010. Staff in Policy Planning and Reserves and Investments, in collaboration with our municipal partners, will immediately begin to develop the detailed proposal. See the section, Next Steps, for details to develop the detailed proposal.

3. Partnerships

The effort to apply initially to a private foundation required non-government organization (NGO) partners. The Clean Air Partnership (CAP) emerged as the strongest partner as their mandate is to foster livable green cities and they coordinate regular Clean Air Council meetings with municipalities in southern Ontario. CAP is a registered charity launched in June, 2000 with a mission to work with partners to achieve clean air, facilitate the exchange of ideas, advance change and promote and coordinate implementation of actions that improve local air quality. CAP's energies are directed at addressing the greening of cities through cleaning the air, stabilizing climate, and protecting people from air pollution and the impacts of climate change.

TRCA is an important conservation partner given their legal powers regarding habitat conservation and initiatives such as the Living City Campus in Vaughan. We continue to work with these partners on the proposal to FCM.

Introductory conversations with representatives of FCM indicated that a project addressing sustainability criteria in development review would be more favourably received if it involved collaboration among municipalities. East Gwillimbury, Aurora, Richmond Hill, Markham, Brampton, and Caledon and York and Peel Regions were approached to collaborate on the Intent to Apply letter to FCM. While staff in all municipalities have been supportive of the project, the Town of Richmond Hill and the City of Brampton emerged as our municipal partners and have contributed to the development of the Intent to Apply letter and describing the project work plan. FCM requires that each contributing partner and lead applicant submit a formal letter of

commitment confirming the cash and/or in-kind contribution to the project when submitting the detailed proposal.

Next Steps

The City and our municipal partners will need to submit a detailed proposal by July 7, 2010 following the positive response received from FCM on May 14, 2010. With each step, the Finance Department will need to determine that the project continues to meet the requirements of the City's Grant Funding Procurement Policy.

As noted above, the funding contributions from municipal partners will be formally confirmed as part of the detailed proposal submission to FCM. The time period for FCM to review a detailed proposal is between 6 to 9 months. As a result, successfully receiving funding from FCM effectively schedules the project for the 2011 budget year.

The partner municipalities have already agreed to a draft work plan consisting of four tasks: (1) guideline development; (2) guideline testing in workshops with municipal staff from the partner municipalities, consultations with the building and development community, and outreach by the Clean Air Partnership and TRCA; (3) peer review; and (4) final report, communications and outreach. Important aspects of the detailed proposal include the baseline calculations for the energy and water sectors. The "Getting to Carbon Neutral" tool kit discussed in the April 13th, 2010 Report to Council (Environment Committee), is able to provide the base line calculations for the energy sector at the community scale. The Region of York monitors water consumption and reports are available to provide the base line values for the water sector. An additional critical aspect of the detailed proposal includes a discussion of the process to develop the Terms of Reference for the work undertaken by consultants and the required qualifications of the consultants.

Prior to finalizing the detailed proposal, City of Vaughan staff will coordinate a meeting with municipal staff in the partner municipalities, including the Commissioners of Planning and appropriate additional staff in Building, Engineering, Economic Development and Planning departments.

Relationship to Vaughan Vision 2020/Strategic Plan

This report is consistent with the priorities previously set by Council.

Regional Implications

The project, Measuring Environmental Sustainability Performance of Development, intended to implement Action Item 2.3.1 of Green Directions Vaughan, is consistent with numerous action items in the Region of York Sustainability Strategy 2007, particularly Section 2 regarding healthy communities and Section 4 regarding a sustainable natural environment.

Conclusion

The Report to Council provides an update on the background work achieved by City staff to date and efforts to seek external funds to develop, test and peer review sustainable development evaluation criteria. The intended result is a user-friendly guideline of environmental performance standards that are accepted by industry and consistent among some municipalities.

Attachments

1. Invitation from the Federation of Canadian Municipalities to submit a Detailed Application (GMF 10337) for the project, Measuring Environmental Sustainability Performance of New Developments.

Report prepared by:

Tony Iacobelli, Senior Environmental Planner, ext. 8630

Respectfully submitted,

JOHN ZIPAY
Commissioner of Planning

DIANA BIRCHALL
Director of Policy Planning

ATTACHMENT NO. 1



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May 7, 2010

Ms. Diana Birchall
Director
City of Vaughan – Policy Planning Department
2145 Major Mackenzie Drive
Vaughan, Ontario
L6A 1T1

Project Title: Measuring Sustainability Performance of New Developments
Application number: GMF 10337

Dear Ms. Birchall:

Thank you for submitting your Intent to Apply to the Green Municipal Fund (GMF). We are pleased to inform you that your Intent to Apply has been accepted. You are now invited to submit a Detailed Application to permit a complete evaluation of your proposed field test.

You are required to submit your Detailed Application within 60 days to ensure timely presentation of your proposal to the GMF Council. If you have not submitted your Detailed Application by July 7, 2010 your file will be closed and you will be required to re-apply to the GMF once your proposal is ready to move forward.

The Detailed Application form has been sent to you by email. Once you have completed the form, please upload it to FCM's secure Web site at <http://gmf-fmv.fcm.ca/ecustomer/enu>. To access the site, you must use the following credentials:

This User ID/Application number and PIN will access only your file, and must be used by anyone who will be working on the application. Please see the guide "Using the GMF Electronic Application System", also sent by email, for more details on how to download the required GMF documents. If you do not have access to the Web, please contact your Application Coordinator for instructions.

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Since 1901
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In the event that FCM's National Board of Directors approves your full application, only eligible project costs incurred on or after the date the Intent to Apply was accepted (**April 30, 2010**) become eligible. Should you wish to begin your project before a decision is rendered, you are entitled to do so, but at your own financial risk. Please remember that the acceptance of your Intent to Apply and the invitation to submit an application does not guarantee funding approval by FCM's National Board of Directors.

The Application Coordinator assigned to your file is Monique Delinelle and she can be contacted at 613-907-6357 or by e-mail at mdelinelle@fcm.ca, should you have any questions regarding the administration of your application.

For any technical questions you may have in the completion of your application, please feel free to contact me at 613-907-6346 or by e-mail at mahlawat@fcm.ca.

For the detailed application please be sure to include information on the quantification of environmental impacts using sustainability metrics that address the prerequisite sectors at a community-wide scale with baseline calculations developed.

Thank you for your interest in the Green Municipal Fund. We look forward to receiving your Detailed Application and to having the chance to work with you further on this opportunity.

Sincerely,



Muni Ahlawat
Project Officer
Green Municipal Fund

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