EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 8, 2010

Item 1, Report No. 4, of the Environment Committee, which was adopted without amendment by the Council of the City of Vaughan on June 8, 2010.

MEASURING ENVIRONMENTAL SUSTAINABILITY PERFORMANCE OF DEVELOPMENT – PROGRESS UPDATE FILE 22.24.1

The Environment Committee recommends approval of the recommendation contained in the following report of the Commissioner of Planning, dated May 25, 2010:

Recommendation

1

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.

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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
- 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.

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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 Statue 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 LEEDTM and Green Globes. A preliminary framework has been developed recognizing performance increments for each sustainability measure that is also crossreferenced 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 MNECB, Net Zero Buildings (Net Zero Energy and Home 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

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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.

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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.

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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.

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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

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

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Item 2, Report No. 4, of the Environment Committee, which was adopted without amendment by the Council of the City of Vaughan on June 8, 2010.

GREEN DIRECTIONS VAUGHAN EMPLOYEE EDUCATION PLAN

The Environment Committee recommends approval of the recommendation contained in the following report of the City Manager, dated May 25, 2010:

Recommendation

2

The City Manager in consultation with the Senior Management Team recommends that:

- 1. Staff proceed with the development of the Green Directions Employee Education Plan as set out in this report;
- 2. The Green Directions Employee Education Plan and the supporting *Green Directions Vaughan On Line* site be operational no later than September 2010;

Contribution to Sustainability

The City has indicated its commitment to a more sustainable future as outlined in *Green Directions Vaughan*. Action 5.1.5 provides that the City, "develop an environmental education strategy to familiarize staff with the provisions of *Green Directions* expanding into an on-going education program". The ethic, principles and goals of *Green Directions* provide the foundation for the education program and support for a corporate culture of sustainability.

Economic Impact

No economic impacts arise from the adoption of this report. It is expected that staff will play the largest role in the development of the plan. However, there will be the need for additional resources to support specific activities and programs. Any additional resources required to implement the plan in 2011, e.g. campaign support, website development, printing, facilitation etc. will need to be considered in the preparation of the 2011 Operating Budget.

Communications Plan

A communications plan is not required at this time. A detailed communications plan will be prepared for the internal launch of the Employee Education Plan and the *Green Directions Vaughan On Line* site in September of 2010. This will introduce the Employee Education Plan and the *Green Directions* site to staff.

Purpose

To report on the development an Employee Education Plan for Green Directions Vaughan.

Background - Analysis and Options

Origin

In 2009 Council approved *Green Directions Vaughan*, the City's Community Sustainability and Environmental Master Plan. On December 14, 2009 the Environment Committee considered a report which provided an implementation update on *Green Directions* and the outlook for 2010. Discussion surrounding this item included the role of culture change in achieving a more sustainable city and how staff education can play an important role in this process. The

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Environment Committee adopted the following motion: "That staff provide an internal cultural plan in anticipation of the move to City Hall." A follow-up report was prepared for March 9, 2010. At that time the Environment Committee directed staff, "to proceed with the development of a comprehensive environmental/sustainability education plan to familiarize city staff in all facilities with the policies of *Green Directions*, which can be expanded into an on-going program."

The City's Approach to Sustainability - The Policy Context

Vaughan's approach to a sustainable future is incorporated into the City's recently approved and emerging policy documents. The preparation of *Green Directions* is part of City's *Vaughan Tomorrow* plan, which is mandated by the City's Strategic Plan *Vaughan Vision 2020*. The Strategic Plan describes Vaughan as "A City of choice that promotes diversity, innovation and opportunity for all citizens, fostering a vibrant community life that is inclusive, progressive, environmentally responsible and sustainable." It further provides that the City lead and promote environmental sustainability by preserving, protecting and enhancing Vaughan's natural and built environment through responsible leadership and innovative policies, practices and education.

Green Directions elaborates on this direction. It provides a definition of sustainability, an ethic and a number of principles to guide the City in the performance of its operational and regulatory functions. They form the underlying basis for the City's corporate culture of sustainability, as follows.

Definition of Sustainability:

Sustainability First: Sustainability means we make decisions and take actions that ensure a healthy environment, vibrant communities and economic vitality for current and future generations.

The Ethic:

In Vaughan we lead by example as responsible stewards of our community. Our decisions entail determining the impact of our actions on the environment; weighing the social/cultural consequences; and understanding any financial implications. Our actions will enhance both the cultural and built environment.

The Principles:

LEADERSHIP: We act as advocates for a sustainable future and support positive initiatives emerging from all sectors of society.

INNOVATION: We build upon best practices to create "Made-in-Vaughan" solutions to guide our operations and shape our plans and policies.

TRANSPARENCY: Our actions are open and traceable; we monitor and report on our progress;

ACCOUNTABILITY: We take responsibility for our actions and we build on past experience.

RESPONSIBILITY: Everyone in Vaughan has a role to play in the plan.

ENGAGEMENT: We involve our citizens and partners in decision making.

The approval of the new Official Plan and the related master plans will complete the suite of policy documents that make up the Vaughan Tomorrow plan. This will give the City a solid

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foundation of policies that are based on the principles of sustainability. The City will now move into a period where implementation is the priority. Continuing to build and promote a corporate culture of sustainability among city employees will support this objective by providing staff with a clear understanding of the benefits of this approach and the City's expectations.

The Employee Education Plan

Operational Responsibility

The implementation and day-to-day operations of the Employee Education Plan will be lead by the Manager of Environmental Sustainability. This is a newly created position and the recruitment process for the new staff member is nearing completion. In *Green Directions* all City commissions are identified as "Resources" for the purpose of implementing the plan (Action 5.1.5). This recognizes the fact that all employees and Commissions have a role in the plan if we are to be successful in moving toward a culture of sustainability. Their work will be showcased as part of the education program. As such, the participation of each affected department in the development of the plan and the implementation of its educational programs and campaigns will be essential to its success.

Purpose, Goal and Objectives of the Employee Education Plan

In developing the Employee Education Plan the following Purpose, Goal and Objectives were adopted to guide its preparation.

Purpose:

 To support and promote the adoption of a corporate culture of sustainability at the City of Vaughan.

Goal:

• To provide staff with the education programs, information and resources that will allow them to operate in a more sustainable manner in the workplace and assist in their personal transition to a more sustainable lifestyle in their home life.

Four Primary Objectives:

Share Information

- Introduce and explain the concept of sustainability to City of Vaughan employees and its importance to the Corporation;
- Convey to staff the City's policies, plans, initiatives and expectations in the area of sustainability;
- Make information readily available through a variety of user-friendly media, while establishing a central consolidated source (Vaughan On Line) pertaining to corporate sustainability.

Take a Holistic Approach

- Provide programs and information that will allow City Staff to adopt more sustainable practices and behaviours while at work;
- Provide information that will also assist employees in adopting more sustainable lifestyles away from the workplace;

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Engage Staff

- Promote and support the launch, implementation and monitoring of departmental programs or campaigns that will further a culture of sustainability;
- Give employees the opportunity to provide comment and input into the development and operation of City programs;

Commitment to Improvement

Promote continuous improvement and learning in Corporate sustainability.

Achieving Culture Change

The finalization of the education plan and its on-going implementation will have to recognize the important role of culture change. This entails bringing together people from a wide range of disciplines, ages, experiences and knowledge levels to support common cause. There will be perceived and real barriers to be overcome, knowledge will have to be exchanged and understanding achieved. Therefore, an understanding of the current situation will be the first step.

A number of methods can be used to obtain a better understanding of staff's perspective on sustainability and related issues. These can include focus groups, surveys, seminars, round table discussions and individual interviews. This information will be useful in identifying concerns and shaping the educational programs that will make Vaughan a more sustainable City. The objective should be to identify the key measures that will make sustainable behaviour the everyday choice.

This is not a discrete activity that can be confined to a single event, survey or focus group. It must be built in to every aspect of the plan. Solutions and inspiration can originate anywhere in the organization. All programs should be undertaken in a way that supports continuous change and evolution, recognizing the contributions that all staff can make in designing and implementing the programs that will help transform the City. This will be undertaken in the development of the plan.

The Sustainability Message

The incorporation of the concept of sustainability into the City's policy documents is one aspect of culture change. There is also the need to obtain employee buy-in to ensure the best implementation of the plan. Expanding all employees' interest will be supported through education and easily accessible information that will allow staff to take actions consistent with City-policy and best practices. However, sustainability should not be treated as a workday experience alone. The City's approach should be built on the practising sustainability both as an employee and a citizen by:

- Explaining the benefits of a more sustainable city and lifestyle;
- Encouraging staff to treat sustainability as a 24/7 commitment;
- Supporting sustainable behaviour at home and at work;
- Building on the connection between a Sustainable Work Place and a Sustainable Household to support comprehensive culture change
- Developing programs that focus on the work environment but also assist employees by providing information that allows them to act in a sustainable manner at home – as community examples or community ambassadors;

The education plan should provide employees with information that will allow them to make informed choices in the workplace and home.

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Building on the Green Directions Brand

Green Directions Vaughan provides the policy basis for the City's sustainability program. The intention is to build on this brand and broaden its presence with City staff. It will be the identifier for the Employee Education Plan, i.e. *The Green Directions Employee Education Plan* with any necessary modifications. All of the education and information functions will appear under the *Green Directions Vaughan* logo.

The Role of Vaughan On Line

A key element for delivering the Employee Education plan and its programs will be a dedicated site on Vaughan On Line, the City's intranet system. The Vaughan On-line site will adopt the name, "Green Directions Vaughan On Line", building a connection to the two brands. Other media will be used to convey information and support programs as appropriate. This may include measures such as flyers, brochures, posters, seminars/lectures, lunch and learn sessions, events, webinars and videos depending on the program or campaign. Personal contact and staff and interdepartmental interaction will also play an important role in the delivery of the plan.

Delivering the Plan: The Three Pillars

The *Green Directions Vaughan On Line* site will deliver three general types of information to the City staff, as described below. Each will serve a particular function and are the three pillars of the program. Using the website as the home base provides a clear and contemporary way of organizing the plan. Schematically, this arrangement is illustrated on Attachment No.1. The three pillars are as follows:

NEWS, OUTREACH AND INTERACTIVE

The purpose of this group is to inform, encourage interaction with the City and to engage in interactive learning. Examples of these types of features may include:

- A message centre providing notification of events, activities, programs and educational opportunities relating to sustainability (both internal and external);
- Provide a survey tool to obtain feedback on policies and programs;
- Featured City Projects, changing periodically, e.g. project of the month.
- A suggestion box;
- Tip of the Week/Enviro-myth buster;
- Provide opportunities for interactive learning, e.g. a personal carbon footprint calculator.

LIBRARY - ARCHIVE - RESOURCE CENTRE

This section would provide staff with research and information sources that would assist in the day to day performance of their jobs and in supporting a culture of sustainability. This function is scalable over time and it can be an important record of past action as well as a link to up-to-date information and practices that will drive innovation. Initially, the following types of content would be anticipated:

- Green Directions Vaughan: A Synopsis of the Plan and Brochure;
- Green Directions Vaughan Community Sustainability and Environmental Master Plan (The full plan);
- Green Directions Vaughan Newsletter and Archive (A Potential Initiative);
- New Employee Brochure (A potential Initiative)
- Link to the Environment Committee Agendas and Minutes;
- Archived Webinars:

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- Resource Library (Postings and Links Related Internal and External Documents. Examples include:
 - Vaughan Official Plan;
 - Vaughan Master Plans;
 - City Departments on VOL;
 - Region of York Official Plan;
 - Region of York Sustainability Strategy;
 - Region of York Master Plans;
 - > Pertinent Agencies, e.g. TRCA, Ontario Power Authority; CMHC
 - Non Government Organizations;
- Personal Sustainability Useful Links.

CAMPAIGNS AND PROGRAMS

The delivery of campaigns and programs will be one of the most important elements of the education plan. The "News" and "Library" functions identified above are necessary to the delivery of a complete plan. They can support culture change, but they are less well equipped to drive it. Change can be best effected through targeted campaigns and programs that have clear objectives and employ messages and communication tools that will resonate with the intended audience. Ideally, the results should be measureable to determine whether the program has met its objectives.

The home base for these activities will be *Green Directions Vaughan On Line*. All information about the campaign or program will be provided on this site. However, it is not intended that the campaigns or programs be static or web-bound. All other communication techniques will be considered and applied, depending on the nature of the initiative, the message and the targeted audience. This could include events, seminars, lunch and learn sessions, reward programs, print material (posters, brochures, flyers) and audio/video tools. Personal contact and staff interaction will also be important. Consideration will be given involving staff as "Green Advocates" possibly on a departmental basis. They could act as resources and immediate links to information and programs that would be useful to staff members.

Green Directions Vaughan On Line would provide convenient and immediate access to all aspects of an on-going campaign including its objectives, the timelines, milestone dates and events, archived materials and ultimately the monitoring of the results.

These types of activities require staff resources to develop and run and there will need to be budget allocations for program material. For example: Consulting or facilitation assistance may be required, speaker's fees could be involved, branding and design exercises may be necessary and supporting print materials and brochures may need to be produced. For this reason, the number of campaigns and programs undertaken each year will need to be carefully planned and budgeted accordingly; and staff availability will need to be taken into consideration. Such initiatives will need to be incorporated into the annual business plans and operating budgets.

Implementation and Launch of the Employee Education Plan and Green Directions Vaughan On Line

Given its symbolic value, it will be helpful to tie the launch of the Employee Education Plan to the opening of the new City Hall. A ceremonial opening of the new building is being planned for early summer (June). This event will have a dedicated communications strategy and supporting content, which will highlight the attributes of the building.

From a practical perspective, it will it will be more advantageous to tie the start-up of the Employee Education Plan and *Green Directions Vaughan On Line* to the beginning of staff occupancy of the new City Hall. This would give the launch of the education plan greater focus.

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Full occupancy is anticipated near the time of Council inauguration and the education plan will be fully functioning. Initiating the Employee Education Plan and the *Green Directions Vaughan On Line* site no-later than September of 2010 will complement this timeframe.

The staff launch of the education plan and website will focus on the operational content and benefits. The communications plan for the launch of the education plan and the website will be developed over the summer. Corporate Communications will assist in the design of the plan and provide advice on the appropriate techniques.

Education Campaigns and Programs for 2010

Based on the proposed timeline, Green *Directions Vaughan On Line* would be available to staff in September. As a living website it will grow and evolve over time. The *News, Outreach and Interactive* and *Library – Archive – Resource Centre* content would be posted for use. The *Campaigns and Programs* section would support the the continuing roll out of a number of programs during the first four to six months of operation. A number of potential programs are identified below. Some are continuations of existing programs and have budget available, which will be incorporated into the plan and the website. The initiatives may include:

- Staff Familiarization with Green Directions Vaughan: Staff will need to be provided with information about *Green Directions*. This should include information about its role in the City's policy regime, an explanation of its definitions and terms, its policies and actions and the importance of staff participation.
- City Hall Staff Education Program: It will be necessary to develop a dedicated staff program aimed specifically at the occupancy of the new City Hall. This program will need to cover the "green" attributes of the building as well the information needed by staff to ensure that the building can function at its planned LEED Gold level of accreditation. This program should be available around the time of occupancy to assist in the delivery of any training or information sessions necessary to the move-in. This campaign will need to be developed in conjunction with Buildings & Facilities, Corporate Communications and Human Resources. Funding will need to be assigned to this task.
- Smart Commute North Toronto Vaughan Employee Trip Reduction Program: With the greater staff concentration at the new City Hall, it will make opportunities for ride sharing and accessing other alternative modes more convenient for more employees. This should be promoted aggressively for the opening of the City Hall and for the remainder of 2010 and into 2011. This will also be important to reduce the parking demand at the Civic Centre, given the on-going construction, the increase in employee parking demand and limited space for new supply.
- Introduction of Three Stream Waste Collection in City Buildings: With the move to three-stream waste collection there will be the need to provide staff with the necessary information on this program's operation. This should be undertaken City-wide as three-stream waste collection is commenced throughout City buildings.
- Energy Conservation: With costs rising, the City should be looking for ways to reduce energy consumption. To economize, staff should be encouraged to minimize their energy use. For example, there are a number of simple and practical behaviours that can be used to reduce electricity consumption. These include ensuring that all nonessential lights, computers and printers and are turned off at the end of the work day. This would include turning out office/task lighting and computers when away from the office during the day.

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Education Campaigns for 2011

In addition to the on-going initiatives, new education programs for 2011 have not been established as yet. A number of opportunities are being investigated by staff. These include:

- Local Food To focus on local food sources, harvest season and making connections between food choices and sustainability;
- Eco-savvy Consumerism Making more sustainable purchasing decisions, with a focus on understanding certifications and labelling systems;
- Water Conservation Centred on International Water Day (March 22, 2011) it will focus
 on water conservation techniques being used at work and in the home and garden (In
 conjunction with the Region's Water for Tomorrow program).

Program evaluation and development will continue through the summer and fall. Funding and staff resources will be assessed and taken into consideration in the preparation of the 2011 Business Plans and the Operating Budget.

Development of the Green Directions Vaughan On Line Site

The *Green Directions Vaughan On Line* site will be an important component of the Employee Education Plan. For this reason staff, with the assistance of the Information and Economic Technology Department, has been developing the site architecture and preliminary examples of content. Staff will have additional information on its status at the May 25 Environment Committee meeting. Further development will take place over the summer as content is created in consultation with staff and as new and on-going educational programs are moved onto the site, in time for its launch. Going forward, working with the departments on the plan's content and programs will be critical to its success.

Foundation for an Environmental Education Strategy for the Public and Business

Action 5.1.7 of *Green Directions* also provides for the preparation of an environmental education strategy for businesses and citizens. This is planned for the 2011-14 Time Frame. The lessons learned in developing the Staff Education Plan and the *Green Directions Vaughan On Line* intranet site will be of assistance in developing the public education program. It is anticipated that a new external website will be developed to support the public program and a substantial amount of content may be shared. Opportunities to proceed with the development of the external plan will be assessed. Resource issues will be evaluated as part of the 2011 Business Planning and Operating Budget approval process.

Relationship to Vaughan Vision 2020

This report is consistent with the Green Directions objective to lead and promote environmental sustainability and implement the Environmental Master Plan.

Regional Implications

N/A

Conclusion

As a result of *Vaughan Vision 2020* and the *Vaughan Tomorrow* program, the City has been amending its policy regime to adopt a more sustainable approach to its operations. With the new policy framework nearly completed the City will now move into a period where implementation will be the primary focus. Having this sound policy base in place is one aspect of culture change. However, the effectiveness of this program will be strongly influenced by the actions of City

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employees. Understanding of the *Green Directions* plan and employee buy-in will assist the City meeting its sustainability objectives. The proposed education plan will help complete the transition to a corporate culture of sustainability.

The goal of the plan is to provide staff with the education programs and information that will allow them to operate in a more sustainable manner in the workplace. Information should also be provided that will assist in their personal transition to a more sustainable lifestyle in their home life. The education plan should provide employees with the resources that will allow them to make informed choices both at home and in the workplace. Gaining an understanding of staff needs and perceptions will help to develop a more responsive plan.

A dedicated site will be developed to support the implementation of the plan. It will build on the *Green Directions* brand and be known as *Green Directions Vaughan On Line*. The site will provide structure to the education plan and deliver three general types of information:

- News, Outreach and Interactive: This section will provide updates, opportunities for consultation and interactive learning;
- Library, Archive and Resource Centre: This would provide research and information sources;
- Campaigns and Programs: It would be the home base for campaigns and programs
 designed to support a culture of sustainability. These programs would be the drivers of
 culture change and would use a variety of communication tools in addition to the
 website, depending on the objective, message and targeted audience.

These three components will support the delivery of the plan. Moving forward, it is proposed that the Employee Education Plan commence operation no later than September 2010 along with the launch of the *Green Directions Vaughan On Line* website.

Five major campaigns have been identified that have potential for implementation in 2010. The timing and implementation of these programs will be evaluated and the program details developed. Three additional campaigns have been identified for potential launch in 2011. They will be evaluated as part of the budget process and business planning process.

Green Directions Vaughan has established a solid policy base to support a more sustainable city. The Employee Education Plan will move beyond policy to address the human factors that will influence the success of the program. On this basis it is recommended that staff proceed with the implementation of the Employee Education Plan as set out in this report and that its recommendations be approved.

Attachments

1. Green Directions Vaughan On Line Employee Education Plan (Schematic)

Report prepared by:

Rebekah McGurran, Economic Developer – Environmental Sector, ext. 8426 Roy McQuillin, Manager of Corporate Policy, ext. 8211

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

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Item 3, Report No. 4, of the Environment Committee, which was adopted without amendment by the Council of the City of Vaughan on June 8, 2010.

GREEN DIRECTIONS VAUGHAN COMMUNITY SUSTAINABILITY AND ENVIRONMENTAL MASTER PLAN YEAR ONE IMPLEMENTATION UPDATE

The Environment Committee recommends:

- 1) That the recommendation contained in the following report of the City Manager, dated May 25, 2010, be approved; and
- 2) That the presentation material entitled, "Parks & Forestry Operations, Vaughan B'leaves Planting Our Future", and brochures entitled "LEAF Local Enhancement & Appreciation of Forests, York Region Backyard Planting Program, Want to plant a tree in your backyard? We make it easy.", and "Planting Our Future, Vaughan B'Leaves, Do you B'Leave? DRAFT", be received.

Recommendation

The City Manager, in consultation with the Senior Management Team recommends that:

- 1. This Attachment 1, outlining progress to-date in implementing the actions prescribed in *Green Directions Vaughan*, be received for information purposes; and
- 2. That a Media Release be issued to inform the public of the advances made in implementing *Green Directions Vaughan* on the first anniversary of its approval.

Contribution to Sustainability

Objective 6.1 of *Green Directions*, "To fully support the implementation of Green Directions at all levels of City operations", provides under Action 6.1.6 that, an annual report to the Environment Committee be prepared on the status of existing programs and accomplishments for the purpose of monitoring the implementation of the plan.

Economic Impact

There will be no economic impact resulting from the adoption of this report.

Communications Plan

On the first anniversary of the approval of *Green Directions Vaughan* it would be appropriate to issue a Media Release acknowledging this milestone. This is consistent with Goal 5 of *Green Directions*, "To be leaders in advocacy and education on sustainability issues", where "Vaughan is committed to sharing its successes with the community. . ." Recommendation No. 2, will provide Staff with direction to proceed with the preparation of a Media Release to illustrate some of the major advances the City has made in implementing *Green Directions*.

Purpose

The purpose of this report is to provide the Environment Committee with an update on the implementation of the *Green Directions Vaughan* one year after its approval.

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Background – Analysis and Options

Background

In April 2009 Council approved the *Green Directions Vaughan Community Sustainability and Environmental Master Plan*. As the City's sustainability plan, *Green Directions* contains a set of recommended actions that address the range of municipal responsibilities including both operational and regulatory functions. It will also serve as the City's Integrated Community Sustainability Plan (ICSP). The ICSP is a long-term plan designed to guide the community toward a more sustainable future by addressing environmental, cultural, social and economic issues. Preparation of the ICSP is a requirement of the federal government's New Deal for cities as a condition of receiving funding from the federal gas tax.

Green Directions establishes a definition of "sustainability", an "environmental ethic" and a set of "principles" to guide the implementation of the plan. The definition of sustainability reflects the breadth of municipal responsibilities, where, "Sustainability means we make decisions and take actions that ensure a healthy environment, vibrant communities and economic vitality for current and future generations."

The plan identifies six categories that classify Vaughan's functions. These are further broken down into goals, objectives and a series of actions, which describe how each of the goals can be achieved. The categories and goals include:

What We Use:

Goal 1: To significantly reduce our use of natural resources and the amount of waste we generate.

How and Where we Grow:

Goal 2: To ensure sustainable development and redevelopment.

How We Get Around:

Goal 3: To ensure that Vaughan is a city that is easy to get around with low environmental impact.

How We Live:

Goal 4: To create a vibrant community where citizens, businesses and visitors thrive.

How we Lead:

Goal 5: To be leaders in advocacy and education on sustainability issues.

How we Operate:

Goal 6: To ensure a supportive system for the implementation of Green Directions.

The objectives are more specific statements of the general goals and they describe how the goals will be achieved. Each of the goals has multiple objectives. The actions refer to tasks that need to be undertaken to achieve the prescribed objective. There can be multiple actions attached to each objective. Actions are assigned to a Commission for implementation within a specific timeframe.

The Basis for an Annual Report

Under Goal 6, "To ensure a supportive system for the implementation of *Green Directions*", it is emphasized that much of the success of the plan will depend on the internal operations and functions that support its implementation. The plan prescribes a series of administrative, oversight, and monitoring actions that are designed to ensure that *Green Directions* is fully integrated into the City's day-to-day operations.

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Objective 6.1 of the plan is to, "Fully support the implementation of *Green Directions* at all levels of City operations". Paragraph 6.1.6 provides that the City:

Prepare an annual report to the Environment Committee on among other things:

- The status of existing programs (milestones);
- Accomplishments;
- New Initiatives; and
- Further opportunities

for the purposes of monitoring the implementation of the plan.

This updates the interim report on *Green Directions* that proceeded to the Environment Committee on December 14, 2009.

Focus of the Update and the Format

Given the early stage in the lifecycle of *Green Directions* the focus will be on measures taken todate to implement the plan's action steps. As such, the primary attention will be directed to projects that are identified for the 2009-10 timeframe or on projects that are classified as "Ongoing". Comments may also be provided for actions planned in the post-2010 period, where preliminary work may have occurred or where additional information is available.

Attachment No. 1 is based on Section 3, "Action Plans", of *Green Directions*. The attachment maintains the plan's format, which sets out the Goals, Objectives, Time Frames and Project Responsibility (Owner and Resource) pertaining to each Action. The update on each Action is set out in a new field entitled, "Status May 2010".

Perspective on *Green Directions Vaughan* – Year One:

Establishing Sustainability as a Corporate Priority - Completion of the Policy Transformation is in Sight

Green Directions Vaughan is part of the City's response to a multitude of challenges and opportunities that the City has and will be facing over the next 20-years. These influences are many and varied; some are specific to Vaughan and others apply much more broadly. They include the environmental (e.g. climate change and air and water quality), the institutional/political (e.g. The Provincial Places to Grow Plan), economic competitiveness (e.g. energy prices, the Canadian dollar and the overall health of the economy), the quality of community life (e.g. healthy, attractive and liveable communities) and a number of major infrastructure projects that will shape our future (e.g. the Spadina Subway Extension, the Viva system expansion and the new hospital). How well Vaughan responds to these conditions will have a major impact on the future of the City.

In the broad sense the City's overall response is directed by the City's strategic plan *Vaughan Vision 2020* and the *Vaughan Tomorrow* program. *Vaughan Tomorrow*, which is mandated by *Vaughan Vision 2020*, includes *Green Directions*, the preparation of a new Official Plan and a number of supporting Master Plans dealing with the provision of infrastructure and services.

One outcome, beginning with *Vaughan Vision 2020*, will be the coordination of the City's policy documents so that they reflect common themes and they are mutually supportive. A primary theme is the need for the City to become more sustainable – in how it operates, how it develops and how it reacts to challenges and opportunities. The City was already proceeding in this direction prior to the start of the *Vaughan Tomorrow* program.

Green Directions, building on earlier achievements, has advanced the process. It has given the City an overarching perspective on sustainability in terms of definitions, objectives and actions that will lead to a better city. It has provided a comprehensive plan to compete in a world where

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sustainable behaviour by both the public and private sector is expected. As such, sustainability is an underlying principle of the City's draft Official Plan and the supporting master plans. Once the OP and Master Plans are approved, the concept of sustainability will be fully integrated into the City's policy regime. This is anticipated for the third quarter of 2010.

The years 2005 through 2010 were a period of transition. The perception of what was possible in 2005 is different than what is now expected in 2010. This changing thinking has given rise to the bolder stance taken in *Green Directions*. The inclusive definition of "Sustainability" used in *Green Directions* is moving Vaughan into new initiatives that will address the triple bottom line objectives of a healthy environment, strong communities and a vibrant economy. With the policy framework nearing completion, the emphasis will increasingly shift to implementation. Becoming a sustainable community will give Vaughan an important competitive advantage for the 21st Century.

Fulfilling the Policy Vision

At the one-year milestone it is appropriate to highlight the status of some of the important initiatives identified in *Green Directions*. All of those identified are either underway or will be starting during this time period. While not exhaustive, they will be major contributors to the sustainable Vaughan of the future. In general, they will all involve a continuing commitment of time and resources and will have an enduring impact on the City. They are listed below.

i. Completion of the Vaughan Tomorrow Program: Adoption of the New Official Plan

Action Status

Project Initiation: Vaughan Tomorrow/OP Review initiated Q1/Q2 2007

Target Completion: Q3 2010

Objective 2.1 of *Green Directions* is to achieve sustainable growth and development by completing and implementing the *Vaughan Tomorrow* program. The adoption and approval of the new Official Plan, the focused area plans and the accompanying master plans will be one of the most important steps the City will take over the next 25-years. Land use and urban form and structure are major determinants of a City's sustainability. The new Official Plan will be a critical influence on how well Vaughan performs environmentally, as a desirable community in which to work and live and from a financial and economic perspective.

Building on the *Vaughan Vision 2020* and *Green Directions*, the Official Plan will be the largest single policy document emerging from *Vaughan Tomorrow*. Its significance is heightened because an approved official plan has statutory authority and its influence extends into all other planning approvals, e.g. subdivisions, site plans and zonings. The new OP and master plans will carry forward the principles of *Green Directions* and the new planning policies will help secure the City's green policy transformation.

Given the multi-disciplinary/multi-departmental scope of the OP and the focused area plans, the Policy Planning Department has engaged the public, agencies and internal departments in an extensive consultation process. This has allowed for a more complete consideration of the concepts of sustainability, from numerous perspectives, in developing the plan.

Significant advances have been made since the last update. The new Official Plan and the focused area studies have been drafted and are available for public comment. Their adoption is scheduled for the third quarter of this year. The plans embrace the concept of sustainability as defined in *Green* Directions. In addition, they incorporate a number of new initiatives such as the preparation of community energy plans for specific areas (as required in the Regional Official Plan) and implement the Provincial and Regional intensification targets.

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ii. Reduction of Greenhouse Gas Emissions – City Facilities and Infrastructure

Action Status

Project Initiation: Q4 2009

• Target Completion: On-going (contingent on legislation)

Objective 1.1 is to reduce greenhouse gas emissions and move towards carbon neutrality for the City's facilities and infrastructure. This is an ambitious objective, which will ultimately be influenced by provincial legislation. The *Green Energy and Green Economy Act* may require municipalities to prepare Conservation Demand Management plans, which may include: A summary of annual energy consumption for each municipal operation; a description and forecast of the expected results current and proposed activities to conserve energy consumed and to reduce the amount of energy consumed by employing any conservation and demand management measures that may be prescribed; and a summary the progress and achievements in other reductions since the previous plan.

The operational details will be specified by regulation. These have not been prepared. As such, the full implications of this potential requirement cannot be determined. The Act also allows the Province to prescribe standards for demand management and conservation. If and how such obligations are imposed could have implications for municipal budgets.

Green Directions recognizes that the regulations may not be in force for some time. However, the City is moving ahead using the Partners for Climate Protection template for reducing carbon output. The first step is to evaluate greenhouse gas emissions by conducting an energy audit on all City facilities. This is prescribed by Action 1.1.2. This is being undertaken by Community Services (Buildings and Facilities). It has participated in an AMO sponsored program to benchmark utilities data (energy/water consumption) for recreation facilities. This information has been assembled and will be incorporated into an RFP for auditing services that is planned for Q3 of 2010.

Potential follow-up activities, leading to an emission reduction plan, are identified in Action 1.1.5. Its preparation could begin once the audit is completed. However, an understanding of the provincial regulations relating to *Green Energy and Green Economy Act* would be beneficial. The initiation of this action would be evaluated in more detail when the results of the audit are available and when the content of the regulations is disclosed.

Meanwhile, the City continues to make advances in the development of sustainable facilities. In April the City received an award from the Association of Municipalities of Ontario recognizing the Chancellor Community Centre indoor pool as province-wide Best in Class for energy efficiency. In addition, work continues on the new City Hall which is designed to achieve LEED Gold Certification. Occupancy of the building is planned for the autumn of this year.

iii. Moving to Energy Conserving Streetlights

Action Status

- Project Initiation: September 2009 (Pilot Project); May 2010 (Full Program)
- Target Completion: On-going implementation

Action 1.1.5 provides for the undertaking of energy conserving streetlight pilots. Significant advancements have been made in this area. In September 2009 Engineering and Public Works initiated a pilot project to assess the merits of LED, Induction and High Energy Fluorescent streetlights. Based on the test results and subsequent analysis, it was determined that LED luminaires are more energy efficient, produce better quality light, have a lower carbon footprint (considering the manufacturing process, longer life and recycling potential) and lower maintenance and cleaning costs. As a result the City is moving ahead with a streetlight replacement program using LED luminaires.

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This project provides a good illustration of how one initiative can embrace several aspects of sustainability. It reduces energy consumption, will minimize the production of greenhouse gases, it will reduce the City's cost and it will improve community life by introducing a more natural white light source, which will enhance the evening environment throughout the city. On April 13, 2010 the Environment Committee recommended proceeding with an RFP for the supply and installation of the street lights. This will result in an annual replacement program, which will initially target older areas. The phased installation will allow the City to take advantage of potential improvements to LED technology in regard to energy savings and quality of light.

iv. <u>Green Energy Investments: PowerStream's Solar Business</u>

Action Status

- Project Initiation: Council authorization December 2009
- Target Completion: On-going implementation

Consistent with Objective 1.2, to promote the reduction of greenhouse gas emissions in the City of Vaughan, Action 1.2.1 provides for the City to demonstrate support for renewable energy by identifying partnership opportunities with business, industries and utilities in the implementation of new and alternative energy sources.

On December 16, 2009 Council passed a resolution authorizing an investment, through Vaughan Holdings Inc., of up to \$27,200,000 in PowerStream's proposed solar business. The solar business will take advantage of the opportunities presented by the *Green Energy Act* in regard to the favourable pricing being offered to providers of photovoltaic power through the Feed-in-Tariff program. PowerStream will generate clean electricity through the installation of roof-top solar panels. This would include both privately held and municipal facilities. City owned buildings have been evaluated.

This represents a strong commitment by the City to the generation of clean and renewable power. This is particularly significant to the City because of the large inventory of flat-roofed industrial/warehouse buildings that characterize the employment areas. As such, the potential exists to accommodate acres of roof-top solar panels. Supporting this measure will further reduce greenhouse gas emissions and provide building owners with another revenue stream, which will help their overall competitiveness.

v. <u>The Vaughan District Energy Feasibility Study</u>

Action Status

Project Initiation: December 2009Target Completion: Q4 2010

Action 1.2.2 states that the City should consider opportunities for developing community energy strategies for the purpose of reducing energy use on a community basis, by applying such measures as district energy systems. It further provides for the City to evaluate all major development areas for their potential for district energy systems and that a feasibility study be undertaken for the Vaughan Metropolitan Centre.

On December 16, 2010 the Board of Directors of Vaughan Holdings Inc. authorized the issuance of a Request for Proposal for consulting services to conduct the Vaughan District Energy Feasibility Study. The study will examine the potential for a District Energy System in the Metropolitan Centre and it will also provide for a high-level examination of opportunities elsewhere in the City. The selection process is complete and on May 4, 2010 the Vaughan Holdings Inc. Board of Directors ratified the retention of a consultant to conduct the study. The target for completion is November of this year.

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District Energy Systems are efficient users of energy and by displacing autonomous systems they reduce the production of greenhouse gases, especially with the use of Combined Heat and Power systems. They are also an effective economic development tool. Building owners can gain a potentially cheaper means of heating and cooling their buildings, lower capital costs, more usable floor space with less space taken up mechanical systems and decreased maintenance costs. These systems can provide a municipality with a competitive edge in attracting new investment.

vi. Green Businesses and Sustainable Business Practices

Action Status

Project Initiation: Employment Sectors Strategy Study 2008
 Target Completion: Completed May 2010 (Council Approval)

• Project Initiation: Economic Development Strategy Q1 2010

• Target Completion: Q3 2010

Objective 4.2 of *Green Directions* provides that the City should attract businesses and investment that will deliver well-paying jobs, provide for a sustainable tax base and continuing prosperity. To give effect, *Green Directions* through Actions 4.2.1 and 4.2.2, recognizes the role that the Employment Sectors Strategy Study will play in achieving this objective. The recommendations of the Employment Sectors Strategy Study are supporting the preparation of the new Official Plan and the new Economic Development Strategy. The Employment Sectors Strategy Study was approved by Council on May 4, 2010.

Objective 4.3 of *Green Directions* is to encourage the establishment of green businesses in Vaughan and the application of sustainable business practices. One of the recommendations emerging from the Employment Sector Strategy Study is that environmental and green industries should be targeted for attraction based on Vaughan's location at the centre of a major market for green products and its existing strength manufacturing, building products and related services.

Green Directions' Action 4.3.1 provides for the development of a business attraction and retention strategy to encourage environmentally-friendly businesses and industries to set up in Vaughan. The Employment Sectors Strategy Study contains recommendations in this regard for use in the new Official Plan and in the Economic Development Strategy. Similarly, Action 4.3.2 recommends the preparation of an eco-industrial park feasibility study. The Employment Sectors Strategy Study also confirms this recommendation for implementation through the new Official Plan and the Economic Development Strategy.

The preparation of the Economic Development Strategy is now underway. It will be a key influence in securing investment by green industries and businesses. It is expected to be completed in the third quarter of this year.

vii. Urban Forest Strategic Plan – The Urban Forest Effects Study

Action Status

- Project Initiation: Five Year Tree Planting Strategy June 2009 (Council)
- Target Completion: On-going; UFORE Study for 2011

The Parks and Forestry Operations Department has undertaken several initiatives to preserve the Natural Areas and foster a healthy natural environment. These initiatives are directly linked to Objective 2.2 of the Community Sustainability and Environmental Master Plan: "To develop Vaughan as a City with maximum Greenspace and an urban form that supports our expected population growth."

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The action item under 2.2.2 states: "Undertake an Urban Forest Strategic Plan that will identify targets for the urban forest in the City and provide strategies for achieving it including planning, maintenance, species and planting recommendations." The five year Tree Planting Strategy was completed and presented to the Environment Committee and approved by Council in June 2009. The Strategy contained the following Recommendations:

- Complete a UFORE study that provides targets and areas for additional Trees to expand the urban forest
- 2. Expand the tree advocacy programs in residential and industrial areas
- 3. Develop a sponsorship programs for businesses
- 4. Expand the communication and marketing strategy
- 5. Revised existing programs and Launch under the Brand "Vaughan B' leaves"
- 6. Improve the tree website
- 7. Expand the tree reserve account
- 8. Appointment of a Tree Advocate
- 9. Partnership backyard tree planting with the LEAF organization

The Parks and Forestry Department has already taken significant steps to implement the above recommendations. The City has entered into a partnership with York Region and the TRCA to undergo a UFORE Study of the urban canopy. This important study is already underway and will identify areas where there is insufficient coverage and will make recommendations on where plantings will have the most positive environmental and economical impact that directly influence the health and well-being of Vaughan's residents. Specifically, the study will make recommendations on the number, species and location of trees to reach an ideal age-class distribution. This will maximize the potential benefits including optimal carbon storage and sequestration; improved building energy use; optimal air pollution removal; minimal release of volatile organic compound emissions; reduced exposure to potential pests; increased urban forest value; targeted leaf area coverage; optimal forestry structure. The results of the study and the recommendations will be available in 2011.

At the May 25, 2010 Environment Committee meeting, staff will present the new branding of **Vaughan B'Leaves.** This brochure included a message from the Tree Advocate that will encourage the community to participate and engage in new and exciting environmental programs to increase trees on both private and public lands. The brochure includes the following programs:

- Planting a tree "Park-side" or dedicate a tree for a special person from a list of preferred native species with a wide range of costs;
- Planting a tree in your own backyard through the LEAF program:
- Vaughan B'Leaves brochure, to educate the public on tree care and and provide opportunities to learn more about environmental opportunities and tree planting;
- Business can now participate in tree sponsorship programs to increase business profile

viii. The New Hospital

Action Status

- Project Initiation (Official Plan Amendment): Q3 2008
- Target Completion (Official Plan Amendment): Q3 2010

A new Hospital is being planned for the 84 acre site at the northeast corner Highway 400 and Major Mackenzie Drive. This site has the potential to be an important example of sustainable development. *Green Directions*' Action 4.1.8 provides for the City to continue support for the

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development of a future hospital for Vaughan and continue to work with other levels of government to provide comprehensive care and integrated health care to the citizens of Vaughan. In August 2009, the City committed \$80 million for the acquisition of the site.

Since the last update, planning for all of the components of the site is now underway. Staff is working with the Vaughan Health Campus of Care and the new York Central Hospital/Vaughan Health organization on the development of the hospital and associated lands. A staff liaison has been appointed. A draft official plan amendment (Jane - Major Mackenzie Land Use Study – The Health Care Campus Centre Plan) has been prepared and a public open house has been held. The statutory public hearing is scheduled for June 1, 2010 with the adoption of the amendment targeted for July, 2010. This site is an example of where the full triple bottom line benefits of a sustainable approach to development could be achieved. This will be subject to all of the supporting documents (e.g. Official Plan and Economic Development Strategy) and resources identifying the appropriate measures and prioritizing actions. Examples of opportunities include:

Environmental

- Comprehensive stormwater management;
- An energy conservation/sustainability plan encompassing the entire site;
- Potential for a district energy system/combined heat and power;
- Investigation of LEED Neighbourhood certification.

Community/Social

- A hospital serving the entire city;
- Potential for related health-care and social services (e.g. long-term care, assisted living);
- Plan for comprehensive and attractive community design;
- Ensuring sensitivity to adjacent residential areas;
- Provide a basis to support earlier implementation of rapid transit on Jane St. and Major Mackenzie Drive.

Economic

- Provide employment in high wage sectors where the City is currently under-represented, e.a.:
 - Health care;
 - Professional, Scientific and Technical Services.
- Attracting a related educational institutions or services;
- Attracting research and development related businesses focusing on the medical, scientific and technical fields.

Applying the principles of sustainability broadens perceptions of what a development can be and how it functions. Given the opportunities available with this site, the planning exercise will be an important learning experience and may emerge as an example for other developments.

ix. <u>Initiation of an Employee Education Plan</u>

Action Status

Project Initiation: Q1 2010Target Completion: Q3 2010

Sharing sustainable best practices and ideas between and among municipal staff and the community is an objective (5.1) of *Green Directions*. Action 5.1.5 provides for the creation of an environmental education strategy to familiarize staff with the provisions of *Green Directions* expanding into an on-going education program. The adoption and approval of the new official plan substantially completes the City's transformation to a policy base that explicitly incorporates

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the concept of sustainability. To reinforce this shift, the employee education plan will facilitate the cultural shift to more sustainable operations and behaviour. On March 9, 2010 the Environment Committee gave direction to proceed with the preparation of a plan. A report has been prepared for the Environment Committee meeting May 25, 2010.

x. Hire a Manager of Environmental Sustainability

Action Status

Project Initiation: Q1 2010Target Completion: Q2 2010

The purpose of Goal 6 of *Green Directions* is to ensure that a supportive system for the implementation of the plan is put in place. Action 6.4.1 provides for the City to make the required organizational and staffing adjustments to support the operation of the Environment Committee and the implementation of *Green Directions*. In response the 2010 Operating Budget included provision for an additional staff position to fulfill this role. A job description for a Manager of Environmental Sustainability was developed. The recruitment process is nearing completion.

Relationship to Vaughan Vision 2020

This report is consistent with the following objectives and initiatives:

Lead and Promote Environmental Sustainability

 Develop and implement an Environmental Master Plan as part of the Growth Management Strategy 2031

Plan and Manage Growth & Economic Development

Complete and Implement the Growth Management Strategy

Regional Implications

There are no Regional implications resulting from the adoption of this report.

Conclusion

April 2010 was the first anniversary of the approval of *Green Directions*. At the one year milestone, the City is continuing to work on a number of major initiatives that will move the City toward a sustainable future.

The completion of the *Vaughan Tomorrow* program with the adoption of the new Official Plan and approval of the remaining master plans will complete the integration of the concept of sustainability into the City's policy and planning documents. This will be an important transformation that will have a major effect on the future of Vaughan. The adoption of the new Official Plan will signal a shift to a new era where implementation will be the primary focus.

Since the last update in December of 2009 progress has been made on a number of major initiatives identified in *Green Directions*. This report has identified some significant examples, which will have enduring impact on the City. They are by no means the only important initiatives proceeding. The status of all the Actions prescribed in *Green Directions* is set out in Attachment 1.

The highlighted examples were selected because they represent major moves which will have the potential to provide long-term benefits to the City, while promoting greater sustainability. Generally, these initiatives have some degree of complexity; some will require inter-departmental cooperation; in some instances the participation of senior levels of government and the private

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sector may be necessary; and staff, consulting or capital resources have or may need to be assigned. Those cited include:

- Completion of Vaughan Tomorrow: Adoption of the New Official Plan;
- Reduction of Greenhouse Gas Emissions City Facilities and Infrastructure;
- Moving to Energy Conserving Streetlights;
- Green Energy Investments: PowerStream's Solar Business;
- The Vaughan District Energy Feasibility Study;
- Green Businesses and Sustainable Business Practices;
- Urban Forest Strategic Plan Urban Forest Effects Study;
- The New Hospital;
- Initiation of an Employee Education Plan;
- Retaining a Manager of Environmental Sustainability.

Work on these initiatives is on-going and they represent a long-term commitment to the future. Therefore, it is recommended that Attachment No. 1 be received for information purposes. Given that this is the one-year anniversary of the approval of *Green Directions Vaughan*, it is also recommended that a Media Release be prepared to highlight for the public some of the important accomplishments of the last year, based on some of the examples set out in this report.

Attachments

Green Directions Vaughan
 Community Sustainability and Environmental Master Plan Implementation Update
 May 2010

Report Prepared by

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(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)