

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 10, 2013

Item 4, Report No. 6, of the Priorities and Key Initiatives Committee, which was adopted without amendment by the Council of the City of Vaughan on December 10, 2013.

4 FINALIZATION OF THE REGION'S "SM4RT LIVING" INTEGRATED WASTE MANAGEMENT MASTER PLAN

The Priorities and Key Initiatives Committee recommends:

- 1) That the recommendation contained in the following report of the Commissioner of Engineering and Public Works, dated November 25, 2013, be approved; and
- 2) That the following Communications be received:
 - C3 Presentation material titled "Implementation of the SM4RT Living Solid Waste Master Plan", dated November 25, 2013; and
 - C4 Booklet titled "SM4RT Living Plan, Integrated Waste Management Plan", dated September 13, 2013.

Recommendation

The Commissioner of Engineering and Public Works recommends that:

1. The presentation from York Region concerning the "SM4RT Living Integrated Waste Management Master Plan" be received;
2. That the City participate in the various pilot projects proposed in the Integrated Waste Management Master Plan; and,
3. This report be received for information.

Contribution to Sustainability

The purpose of the Region's Integrated Waste Management Master Plan (IWMMP) is to ensure a sustainable waste management system that can deal with the issues of today, as well as those for the next 40 years.

Economic Impact

From a Regional perspective, budget cost estimates for the master plan are approximately \$800,000 per year between 2014 and 2018.

The City is committed to responsible waste management practices and continuous improvement. As such, staff will work with York Region to "host" some of the initiatives identified in the Region's IWMMP. Should there be additional costs associated with the City's participation in any of the pilot projects, staff will prepare a report to Council outlining the associated costs, and seek approval, prior to implementing one or more of the initiatives; however, there is no immediate requirement for additional funds for any of the City's current waste management programs.

Communications Plan

As part of the master plan process, there have been numerous outreach programs and public meetings to gather residents' input since the plan's inception in Q2 of 2011. These outreach initiatives are outlined in the SM4RT Living Plan. They included, but were not limited to:

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 10, 2013

Item 4, Priorities Report No. 6 – Page 2

- idea generating workshops
- youth forums
- citizen panels
- places and special events
- regional and local staff meetings
- stakeholder advisory committee
- steering committee meetings etc.

In addition, the IWMMP Stakeholder Advisory Committee, comprised of business and non-profit organizations, played an integral role in the development of the SM4RT Living Plan. Going forward, the Committee will provide support on the implementation of selected pilot programs identified in the IWMMP.

Purpose

The purpose of this report is to provide the final SM4RT Living Integrated Waste Management Master Plan, and provide the platform for the Region to present an overview of the IWMMP, including the first five years of recommended implementation actions.

Background - Analysis and Options

York Region, and its Area Municipalities, currently boasts an impressive 57% diversion rate

With an annual diversion rate of 57% (2012), York Region, together with local municipal partners, has one of the highest annual diversion rates in Ontario. Since 2009 the annual diversion rate, which includes residue from processing operations, has remained fairly consistent, whereby the cost to maintain these programs have incrementally increased. Through the IWMMP, it was determined that investing additional monies into new diversion programs and technologies would provide only marginal returns in diversion. Instead, the IWMMP sets out a strategy that capitalizes on existing programs, mitigates the need for additional capital infrastructure, and focuses on changing people's behaviour towards waste, using the four R's (reduce, re-use, recycle, recover) as the cornerstone for change.

Changing behaviour will have the greatest long-term impact on waste generation and diversion

Many of the options presented in the IWMMP focus on reducing the waste generation rate (amount of waste generated per capita) through changes in behaviour. Emphasis therefore is on policy, advocacy, influencing behaviour change through promotion and education, and partnerships development. Putting emphasis on these areas will help lower the per capita waste generation. This, in turn, will enable the Region to continue to service the Region's growing population, without reliance on significant new or expanded waste processing and disposal infrastructure.

Local and regional governments have roles to play in setting examples for their residents

The report also identifies the need to 'lead by example' in municipal owned building and facilities and to work with school boards to support the development of 'zero waste schools'. It is anticipated that such initiatives, if successful, could further reduce waste generation rates from 321 kg / person / year (2012) to 289 kg / person / yr (2031). One of the primary drivers to reduce waste generation is the food waste reduction strategy.

The IWMMP also identifies the need to work with the development industry to facilitate waste diversion. Municipalities are encouraged to enact policies / by-laws and processes to ensure

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 10, 2013

Item 4, Priorities Report No. 6 – Page 3

development submissions incorporate multiple waste diversion options. In 2005, Council approved the City's Waste Collection Design Standards Policy, which speaks to this issue, and addresses other salient components, such as site access and loading areas. This policy has been, and continues to be, used by other local municipalities as a baseline for their own waste related development requirements / policies.

A total of 17 pilot projects and programs have been identified and prioritized to be initiated in the first five years of the plan

During the development stages (Phase 1 and 2) of the IWMMP, a number of program delivery options were identified. In the third phase, these options were prioritized to address waste management system gaps and to quantify the overall life cycle benefits of the initiative. This process ultimately identified 17 different pilot projects and programs to be implemented in the first five years.

Summarized in the '4R' Hierarchy of waste diversion, the 17 initiatives are as follows:

Reduce

- Reducing Food Waste
- On-site Backyard Composting
- Investing Green Procurement Opportunities

Reuse

- Textile Collection
- Swap Events
- Investigating attitudes around reuse
- Tool Sharing

Recycle

- Advocating for Change
- Planning for Growth
- Multi Residential Data Collection & Program Development
- External Funding for Blue Box
- Planning for new Organics Processing Capacity
- Long Term CEC and Depot Strategy

Recover

- Planning for Future Residual Processing Facility Capacity
- Policy Development for EFW
- Planning EFW Expansion

Other

- Exploring Alternative Financing Models

The feasibility of a Region-wide roll out of any or all these programs will be determined by the evaluation of the associated pilots. Assessment of the long-term viability of these programs will include identifying challenges to program success and abilities to leverage community and industry partners to reduce waste.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 10, 2013

Item 4, Priorities Report No. 6 – Page 4

The results of the pilot projects will be used to determine Vaughan-specific savings and/or efficiencies

It has been estimated, that by 2031, avoided system costs of \$22 per household could be achieved, if all the components of the plan are successfully implemented and embraced by the public. This is premised upon the fact that, among other things, the annual per capita waste generation rate will decrease from the current rate of 321 kg/person to 289 kg/person by 2031.

The City is currently undertaking an operational review of solid waste collection activities across various departments. The knowledge gained from participating in various pilot projects will be used to determine overall potential cost savings and/or waste reduction tonnages, specific to Vaughan, and will provide additional input into the consideration of potential service level adjustments and/or alternative service delivery options.

Multi-residential housing will increase significantly over the next 40 years

Growth in the multi-residential sector in York Region is expected to increase by 180% over the next 40 years. Most of this growth will occur in the southern municipalities of Markham, Richmond Hill and Vaughan. As Vaughan currently only services a limited number of multi-residential buildings, with the bulk of collection from new buildings being the responsibility of the owners to provide, the impact of this growth is currently mitigated.

Relationship to Vaughan Vision 2020/Strategic Plan

This report is consistent with the priorities previously set by Council and ties into the following Vaughan Vision 20/20 Goals and Objectives:

Goal:	Service Excellence
Objective:	Lead & Promote Environmental Sustainability
Objective:	Demonstrate Excellence in Service Delivery

Regional Implications

The Region continues to move forward on the implementation of the pilot programs and will determine, over the next five years, if initiatives are meeting the intended diversion/reduction goals.

Although the cost of service delivery will continue to increase, due primarily to growth and inflation, the implementation of the SM4RT Living Integrated Waste Management Master Plan is projected to offset increased costs of waste management services through demand reduction.

Cumulatively, avoided system costs are estimated to be \$62 million, including avoided capital infrastructure costs, by 2031. If successful, the plan will also result in an overall reduction in the total amount of waste by 9%, or 166,000 tonnes. It is through the various pilot projects that these estimated cost savings and waste generation rates can be better quantified.

Conclusion

The Integrated Waste Management Master Plan is designed to look at the waste management system that is in place today, and provide a plan that can meet the challenges and opportunities over the next 40 years. The short term (5 year), focus of the SM4RT Living Plan is the implementation of 17 recommendations, based on the four R's hierarchy of reduce, re-use, recycle, and recover. The main focus of the plan is on changing people's behaviour towards waste. Additional strategies, such as advocacy to further address changes to the waste

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 10, 2013

Item 4, Priorities Report No. 6 – Page 5

management system as a result of extended producer responsibility, securing long term source separated organics processing capacity, green procurement, and energy recovery from waste, are also part of the plan. The long-term performance and success of these initiatives will be partially gained through the strategic internal and community partnerships, as well as the use of pilot projects to better refine potential cost savings and waste diversion values.

The Plan will be updated every four years, to coincide with terms of Council, with the first update in 2018/2019. The Region shall provide an annual report delineating the progress of the pilot programs and initiatives identified in the IWMMP.

It is recommended that the City of Vaughan continue to work with the Region, and participate in the various pilot projects to help ensure the success of the programs and initiatives identified. Staff will investigate any local municipal costs associated with such initiatives, and bring forward these funding requests to Council.

Attachments

N/A

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