EXTRACT FROM COUNCIL MEETING MINUTES OF MARCH 22. 2016

Item 2, Report No. 14, of the Committee of the Whole (Working Session), which was adopted without amendment by the Council of the City of Vaughan on March 22, 2016.

2 CITY OF VAUGHAN DRAFT MUNICIPAL ENERGY PLAN (MEP)

The Committee of the Whole (Working Session) recommends:

- 1) That the recommendation contained in the following report of the Deputy City Manager, Planning & Growth Management and the Director of Policy Planning & Environmental Sustainability, dated March 7, 2016, be approved;
- 2) That the presentation by the Manager of Environmental Sustainability and Communication C1, presentation material titled "City of Vaughan's Municipal Energy Plan" dated March 7, 2016, be received;
- 3) That staff be directed to report back to a future Committee of the Whole (Working Session) meeting on the matter of air emissions along Highway 400 and other transportation corridors as part of the municipal comprehensive review and the Green Directions Vaughan process; and
- 4) That the deputation by Ms. Gloria Marsh, York Region Environmental Alliance, Dariole Drive, Richmond Hill, be received.

Recommendation

The Deputy City Manager, Planning & Growth Management and the Director of Policy Planning & Environmental Sustainability recommend:

- 1. That the draft version of the City of Vaughan's Municipal Energy Plan be received for information purposes and that any comment originating from this meeting be taken into consideration in the finalization of the Municipal Energy Plan (MEP); and
- 2. That this draft of the Municipal Energy Plan be circulated to the Stakeholder Advisory Group and City departments for review prior to bringing it forward to Committee of the Whole for final approval by June 2016.

Contribution to Sustainability

Leadership and action are core principles that guide the City's actions on sustainability. The Municipal Energy Plan, building on the Council–approved Community Climate Action Plan, is consistent with the priorities previously set by Council in *Green Directions Vaughan*, Community Sustainability Environmental Master Plan:

- Goal 1, Objective 1.2: To reduce greenhouse gas emissions through actions such as working with the community to implement the local action plan and undertaking energy conservation initiatives.
- Goal 2, Objective 2.3: To create a City with sustainable built form by considering recommendations outlined in the local action plan to integrate smart energy planning in new developments and retrofit opportunities.

Economic Impact

An Agreement between the City and the Province of Ontario, under the Municipal Energy Plan Program, is in effect as of July 21, 2014 to bring the City's Community Climate Action Plan (CCAP) into the Municipal Energy Plan (MEP) framework in three stages of work. The Province is

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providing \$54,840 to the City to undertake the project, which must be completed by July 21, 2016 under the terms of the Agreement. The City of Vaughan was one of the first of eight municipalities to receive funding to develop a MEP and will also be one of the first jurisdictions to make the transition from an existing Community Climate Action Plan into a Municipal Energy Plan.

The Ministry of Energy recently introduced a new funding stream to enhance existing energy plans that will be available to municipalities that have already developed a complete or partial Municipal Energy Plan, Climate Action Plan, or other energy plan. This funding is for enhancing an existing energy plan which could include updating utility or building data and/or creating new implementation plans or maps. Staff will be evaluating this program for future funding opportunities to ensure the MEP remains relevant as energy resources, needs, and targets change.

Communications Plan

During the development of the MEP, the City of Vaughan engaged in an outreach program with stakeholders at a number of levels to discuss the background and processes involved in developing the MEP. The City of Vaughan presented at the Clean Air Council's Clean Air Summit, as well as at several Clean Air Partnership regional meetings (the Clean Air Partnership is a collaborative network of 27 member municipalities from across the GTHA). The City also presented at the Ontario Energy Community of Practice symposium held at the Vaughan City Hall in 2014.

A Stakeholder Advisory Group (SAG) was established, including 35 organizations from a variety of sectors representing energy users and distributors, land use planning and development, buildings and built form, as well as transportation. A total of five SAG meetings were held throughout 2014-2016 to discuss goals, analysis, actions, targets, integration, and implementation aspects of the Plan.

The Policy Planning & Environmental Sustainability department will work closely with Corporate Communications on a news release announcing the Municipal Energy Plan and its key aspects, and the timing and content of any broader messaging for the community. The Environmental Sustainability section of the City of Vaughan's website will highlight the MEP and share community engagement opportunities. Additionally, progress achieved will be shared with the MEP Stakeholder Advisory Group and the City of Vaughan's strategic partners such as the Clean Air Partnership and Smart Commute. This is consistent with Goal 5 of Green Directions Vaughan "To be leaders in advocacy and education on sustainability issues" where "Vaughan is committed to sharing its successes with the community".

Working with the Office of Corporate Initiatives and Intergovernmental Relations, the MEP will be shared with Federal MPs and Provincial MPPs to ensure awareness of Vaughan's climate change initiatives as part of City of Vaughan and Region of York efforts to garner infrastructure funding to support retrofitting and resiliency initiatives aligned with Federal and Provincial priorities.

Purpose

The purpose of this report is to provide Council with an update on the progress being made with the Municipal Energy Plan and to seek input to inform the finalization of the plan.

Background - Analysis and Options

The Vaughan Community Climate Action Plan, 2014

As recommended in Green Directions Vaughan, Objective 1.2, the City of Vaughan aims to promote the reduction of greenhouse gas emissions in the City of Vaughan through actions such

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as working with the community to develop a Greenhouse Gas Emission Community Climate Action Plan (CCAP) and an associated emission reduction target.

Staff undertook the preparation of a CCAP, which was approved by Council in early 2014. The CCAP was developed through a collaborative and stakeholder driven process that included a 40 member steering committee stakeholder group, a community forum, an on-line idea sharing platform, a community tweet-up and face-face community outreach at a community centre. The CCAP established a mission for climate change mitigation and identified specific actions and additional opportunities to reduce greenhouse gas (GHG) emissions at home, at work and as we move. It set a target for reducing community GHG emissions by 20% per capita below the 2006 baseline year by 2026. The CCAP is a commitment of the City's membership in the Partners for Climate Protection (PCP) program.

Transitioning the Community Climate Action Plan to a Municipal Energy Plan

In August 2013, the Ministry of Energy announced funding to support the development of Municipal Energy Plans. A Municipal Energy Plan (MEP) is a comprehensive long term plan to improve energy efficiency, reduce energy consumption and GHG emissions developed within the context of the built environment, land use planning, growth planning, and generation and transmission infrastructure. This presented the City with an opportunity to better understand local energy needs and consumption patterns from a geographical perspective and to align the CCAP with the Municipal Energy Planning framework. The City of Vaughan successfully secured funding from the Ministry of Energy in 2014 and proceeded to work with LURA Consulting to leverage the CCAP to develop a MEP.

The MEP Stakeholder Advisory Group (SAG) was established and sought the participation of the former CCAP Stakeholder Steering Committee to advise on the development of the MEP. The MEP SAG included 35 stakeholders from a variety of sectors representing energy users and distributors, land use planning and development, construction, as well as transportation. A total of five SAG meetings were held throughout 2014-2016 to discuss goals, analysis, actions, targets, integration, and implementation aspects of the Plan.

The draft of the MEP provides analyses to complement the efforts of the CCAP. The MEP presents Vaughan's energy consumption data in 2013, including electricity and natural gas consumption, while taking into account energy use by sector. This analysis was able to produce residential energy maps to spatially illustrate energy consumption patterns. The MEP provides GHG forecasts to 2031 and examines the implications of a business-as-usual approach for energy planning and consumption in Vaughan. Additionally, the MEP includes an economic analysis based on the approach developed by the City of London, Ontario, to illustrate the proportion of money spent on energy that stays within the City or is transferred to other parts of Canada or internationally.

The MEP incorporates the previously approved actions and opportunities that relate to 'At Home' (Residential), 'At Work' (Industrial, Commercial, and Institutional), and 'On the Move' (Transportation) that were identified in the CCAP to achieve energy and GHG reductions. However, the MEP introduces two new areas of focus, including 'For the Economy' and 'In Conversation'. 'For the Economy' will strive to stimulate economic development in the form of new businesses that focus on the energy sector and 'In Conversation' will aim to ensure that education, awareness, and behavior change programs instill a culture of conservation in the broader community.

The transition in Vaughan to a more service based/light industrial employment base and the Province's phase-out of coal power plants resulted in a per capita GHG emission reduction in 2013 that is lower than the target initially forecast in the CCAP for 2026. The actions identified in

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the CCAP remain relevant for Vaughan to contribute to meeting global climate change mitigation targets and have only been slightly revised through the MEP. With a refined emission forecast identified in the MEP, Vaughan is able to set a target for a 22% per capita reduction in GHG emissions from the 2006 baseline by 2031 through the implementation of the updated actions and opportunities.

It is anticipated that GHG reductions in the Vaughan community will produce multiple quantifiable and qualitative economic, social and environmental benefits. As GHG emission reductions are often achieved through actions supporting energy efficiency and conservation, efforts in this area will provide energy cost savings to the public as well as to the commercial, institutional and industrial sectors as energy efficient technologies are applied and overall energy usage is reduced. The MEP examines in more detail the economic considerations of energy costs in Vaughan.

The City of Vaughan will continue to work closely with the SAG to solidify an implementation framework as well as monitoring and reporting procedures to track progress of the MEP. It is recommended that the MEP be flexible to adapt to the Vaughan community as it changes. The MEP will remain a "living document" that will consider changes such as population growth, new communities and industries, as well as a shifting policy context as energy planning in Ontario continues to make significant progress towards clean, reliable energy solutions. As such periodic updates will be necessary.

Next Steps

City staff will seek final input from the SAG on the draft Municipal Energy Plan after the March 7, 2016 meeting of the Committee of the Whole (Working Session). Any additional recommendations will be incorporated into a final MEP to recommend to Council for approval in May or June 2016 in order to meet the City's commitment in the Agreement with the Province.

Relationship to Term of Council Service Excellence Strategy Map (2014 – 2018)

This report is consistent with the Term of Council priority of continuing to cultivate an environmentally sustainable city as demonstrated by the previously approved CCAP. The MEP builds on the goals identified in the CCAP to work towards energy security, supporting local economic development, fostering a culture of social responsibility and sustainability, and identifying actions to reduce the community's energy consumption and GHG emissions.

Regional Implications

The York Region Official Plan (ROP 20210) requires the development Community Energy Plans at the following geographic scales:

- a municipal-wide Community Energy Plan (ROP 2010 policies 4.1.14 and 5.2.13);
- for each Regional Centre (ROP 2010 policy 5.2.24); and
- for each New Community Area (ROP 2010 policy 5.6.10).

The Municipal Energy Plan is intended to conform with the Regional Official Plan policies requiring the preparation of the municipal-wide energy plan.

By identifying impactful and cost effective actions to reduce greenhouse gas emissions throughout the community, Vaughan will demonstrate regional leadership in working to combat climate change and reducing energy consumption. The initiatives identified in the MEP have potential to positively impact the economic, social and environmental sustainability of the region.

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Conclusion

The MEP is intended to replace the CCAP by incorporating the actions and opportunities that were previously identified in the Council-approved CCAP to reduce energy consumption and achieve GHG reduction targets. The draft MEP establishes a refined target for a 22% per capita reduction in GHG emissions from the 2006 baseline by 2031, which will result in a total GHG reduction of 459,939 tonnes/year.

The implementation of the identified actions and opportunities will require the efforts of many members of the Vaughan community. To be effective, the MEP must be embraced by the broader community and widely implemented. Therefore, the City of Vaughan will continue to liaise with the SAG to establish an implementation framework and monitor progress. By committing to working with the community to reduce energy and greenhouse gas emissions, the City of Vaughan will be able to demonstrate leadership as a strong environmental steward, working to improve community energy conservation to combat climate change at the local level.

Vaughan's Municipal Energy Plan provides a platform for more advanced opportunities and transformational targets in the future. The policy context is shifting as energy planning in Ontario continues to make significant progress towards clean, reliable energy solutions. Through the development of the Long-Term Energy Plan (LTEP), the Ontario government has committed to a "Conservation First" policy and an efficient, low energy intensive future. The Independent Electricity System Operator (IESO) continues to consult on the York Region Integrated Regional Resource Plan to examine energy generation, transmission, distribution and conservation options from a regional perspective. At the 2015 United Nations Climate Change Conference in Paris (COP21), 195 countries adopted the first-ever universal, legally binding global climate deal. The Municipal Energy Plan will help set Vaughan in the right direction to a smart energy future.

Therefore, it is recommended that this report be received for information purposes and that any resulting comments and input be considered for inclusion into the final draft of the Municipal Energy Plan.

Attachment

1. Preliminary Draft Municipal Energy Plan

Report prepared by:

Kailyn Smith, Sustainability Coordinator, x. 8941 Tony Iacobelli, Manager, Environmental Sustainability, x. 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.)