



Report to: General Committee

Date Report Authored: September 17, 2012

---

**SUBJECT:** Municipal Support for Feed-In-Tariff Projects in Markham  
**PREPARED BY:** Graham Seaman, Senior Manager, Sustainability Office (x.7523)

---

**RECOMMENDATION:**

- 1) THAT the report entitled “Municipal Support for Feed-In-Tariff Projects in Markham” be received; and,
- 2) THAT Markham Council, exclusively in respect to the Ontario Power Authority Feed-In-Tariff 2.0 program, supports the development of renewable energy projects within the City of Markham, provided that they meet the criteria of being solar photo voltaic roof top projects less than or equal to 500kW, have non-reflective coated panels, are not constructed on properties on the Markham Register of Property of Cultural Heritage Value or Interest (unless prior support has been obtained from Heritage staff and the Heritage Markham Committee), have been reviewed by City staff for good aesthetic design and do not require a tree removal permit to prevent shading; and,
- 3) THAT renewable energy project proponents requesting municipal support in respect to the Ontario Power Authority Feed-In-Tariff program, be required to submit such information as may required by City staff to evaluate the project for compliance with the approved criteria; and,
- 4) THAT renewable energy project proponents requesting municipal support in respect to Ontario Power Authority Feed-In-Tariff program be required to pay a fee of \$2070 when submitting requests for municipal support; and,
- 5) THAT the Chief Administrative Officer be authorized to execute on behalf of the City of Markham, the Ontario Power Authority’s “Prescribed Form/Template: Municipal Council Resolution” for any renewable energy project that meets the approved criteria as determined by City staff, and any other documentation to meet the Ontario Power Authority’s requirements; and,
- 6) THAT all renewable energy projects that, in the opinion of City staff, do not meet the approved criteria be referred to Council for further consideration; and,
- 7) THAT this resolution’s sole purpose is to enable the participants in the Ontario Power Authority’s FIT Program to receive priority application processing points under the FIT Program and may not be used for the purpose of any other form of municipal approval and will expire in one year’s time from date of submission to Markham; and further,
- 8) THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

**PURPOSE:**

---

The purpose of this report is to obtain Council approval for the CAO to issue on behalf of Council, municipal support for renewable energy Feed-In-Tariff (FIT) projects that meet specific criteria established by the City of Markham.

**BACKGROUND:**

In 2009 the Ontario *Green Energy Act* S.O. 2009, (GEA) enabled a Feed-In-Tariff where renewable energy generated from; solar, wind, water and biomass would receive preferred rates (\$'s) per kilowatt-hour (kWh) of electricity generated.

**Markham's Solar Experience**

Markham was the first municipality to commission their own FIT project; the 250kW roof top solar array at 8100 Warden Ave with a FIT rate of \$0.713/kWh. The city has further commissioned through roof top leases with PowerStream Solar; 250kW of solar at the Angus Glen Community Centre and Library and 350kW of solar at the Thornhill Community Centre. We expect another four leased roof tops to be completed by PowerStream Solar in the next two years. The Cornell Community Centre and Library and Pan Am building are both being constructed to be "solar ready" to easily enable deployment of solar roof top systems at a later date on approval of Council.

**Greenprint Alignment**

Further, the Greenprint, Markham's Community Sustainability Plan, has an Energy and Climate priority objective: Netzero energy, water, waste and emissions by 2050, and this requires significant deployment of renewable energy generation in Markham to eventually balance our energy consumption.

**FIT Program Background**

As recommended in the GEA a two year review of the FIT program commenced late in 2011 and was completed with the release of the FIT Program Directive from the Ministry of Energy to the Ontario PowerAuthority on April 5, 2012, commonly referred to as FIT 2.0, attached as appendix 1.

<http://www.powerauthority.on.ca/sites/default/files/page/FIT-ReviewApril-2012.pdf>

The rates per kWh were reduced to match the capital cost reductions the industry has achieved in deploying renewable energy systems, the new rates are on page 8 of Appendix 1.

The FIT 2.0 rules include a points system where projects are awarded points for aboriginal participation, community participation, municipal support or where a project is hosted or has participation by a hospital, school, college or university. As shown on page 7 of Appendix 1.

**Current situation**

---

Markham has received multiple requests for municipal support from renewable energy project owners and developers. Many of the other municipalities in Ontario have received similar requests.

The Town of Caledon, recently passed a resolution very similar to the recommendations included in this report, attached as appendix 2.

<http://www.caledon.ca/content/townhall/council/agendaitems/DP-2012-071.pdf>

The City of Mississauga passed a resolution granting support in principle to solar roof top projects without reservation.

[http://www.mississauga.ca/file/COM/GC\\_Agenda\\_Sept192012.pdf](http://www.mississauga.ca/file/COM/GC_Agenda_Sept192012.pdf)

## **OPTIONS/ DISCUSSION:**

In order to efficiently and effectively enable renewable energy generation within Markham in support of the *Green Energy Act* and the Greenprint, Markham's Community Sustainability Plan, Markham should have a process to provide municipal support for local FIT project applications so each project proponent does not need to approach Council for endorsement on a case by case basis.

### **Automatic support criteria**

Markham has developed a comfort level with roof top solar projects on its own buildings and therefore it is recommended that Council support solar photo voltaic roof top projects less than or equal to 500kW, that have non-reflective coated panels, are not constructed on properties on the Markham Register of Property of Cultural Heritage Value or Interest, that have been reviewed by City staff with respect to design/roof top location and do not require the removal of trees in good condition to prevent shading.

### **Project size**

Solar projects that are less than or equal to 500kW are expected to be the typical size proposed in Markham. Projects of this size range are ideal for flat industrial roof tops; a 500kW system would cover approximately 100,000 sqft of roof top.

Projects that are under 10kW are microFIT projects and do not have a priority points system and the process to secure an Ontario Power Authority contract is simplified compared to FIT projects.

### **Renewable technology**

Only solar photo voltaic roof top projects that meet the criteria are recommended for automatic support whereas all other renewable types (wind, biogas, water, solar ground mount) will be directed to petition Council directly for support.

---

Non-reflective coated panels reduce glare that might disrupt air traffic to Buttonville or high rise neighbours and slightly increases panel efficiency.

### **Heritage**

Solar panels are generally not a feature traditionally found on cultural heritage properties and “blanket” support should not be provided. However, there may be circumstances where the introduction of solar panels on a heritage property or a property within a heritage conservation district does not negatively impact either the heritage attributes of the individual resource or the overall heritage character of the area. These applications need to be evaluated on a site specific basis. The City of Kitchener has recently adopted guidelines for the installation of solar panels on cultural heritage properties which address respect for historic material, aesthetics & visibility, design & installation, location and reversibility & physical impact. Therefore, it is recommended that any projects proposed on properties on the Markham Register of Property of Cultural Heritage Value or Interest should be reviewed by Heritage Section staff and the Heritage Markham Committee before the applicant petitions Council directly for support.

### **Urban design**

The addition of potential solar panels on buildings in Markham are not typically contemplated during the design of the building. Therefore it is recommended that Planning and Urban Design department review all applications for solar panel installations to ensure the installation and aesthetics are consistent with the character of the neighbourhood.

### **Tree preservation**

Through the Greenprint, Markham places high value on our natural heritage and infrastructure. Trees provide shading to reduce energy use, protect us from wind, purify the air, help with stormwater management, reduce crime and is physically and psychologically calming. Trees also play a role in increasing property values. Therefore it is recommended that any projects in conflict with trees due to shading of solar panels and therefore requiring the removal of trees be carefully evaluated using the process set out in Markham’s Tree Preservation By-Law.

Additionally staff will consider if the tree can be successfully pruned to accommodate the array without causing excessive injury or stress to the tree, and whether future pruning to maintain the clearance needed continue periodically without causing excessive injury or stress to the tree.

Projects requesting Council support that require the removal of a tree will be required to complete and submit Markham’s Tree Removal Application along with their Council support request so that Tree Preservation staff can evaluate the tree appropriately.

**Process to administer**

It is proposed that staff require proponents of renewable energy projects seeking municipal support in respect to the FIT program to submit whatever information the City requires to evaluate the project against the approved criteria. At a minimum, proponents will be required to submit the project site's municipal address, site photos or drawings, proposed project size, renewable generation technology descriptions, project owner and/or developers contact information and if tree removal is required submit a Tree Removal Application and pay any relevant permit fee.

It is proposed that Markham initially charge a fee of \$2070, consistent with the City's minor site plan application fee where there is no increase in GFA, exclusive of the Tree Removal Permit fee. Staff will review the staff time and costs associated to administer the following process periodically to ensure the fee is appropriate.

The following process is proposed:

1. Application form is to be made available on-line and in hard copy at a service counter
2. Applications and fees will be received at a designated service counter
3. Applications are sent to the Sustainability Office where they are reviewed for completeness and whether they meet the criteria.
4. If they meet the criteria the Sustainability Office will circulate the application to Heritage Planning to check against the Heritage Register, Planning and Urban Design Department to consider the aesthetics of the project, if tree removal is required the Tree Preservation process will be followed and administered by Operations staff.

If after circulating the submitted application for comment and staff are of the opinion that the project meets the approved criteria, the Sustainability Office will provide the CAO with a letter to give municipal support for the solar project and execute the Ontario Power Authority's "Prescribed Form/Template: Municipal Council Resolution" on behalf of the City.

Renewable Energy Projects that do not meet the approved criteria, i.e. are not rooftop and/or are greater than 500kW, are in a Heritage area and not have prior support from the Heritage Markham Committee, do not meet neighbourhood aesthetics or require a tree removal permit will be directed to submit to Council for further consideration.

The Sustainability Office will track all projects requesting support and will report back to Council on the projects that receive automatic support and those that are rejected due to not meeting the criteria.

**Other approvals**

Proponents of renewable energy projects will still have to meet the Ontario Power Authority's FIT 2.0 criteria prior to receiving a contract offer to connect to the electricity grid to receive the feed-in-tariff. Additionally, proponents will be required to comply with any other City policy or By-laws pertaining to the actual construction of the proposed project.

**FINANCIAL CONSIDERATIONS AND TEMPLATE: (external link)**

Not applicable.

**HUMAN RESOURCES CONSIDERATIONS**

Not applicable.

**ALIGNMENT WITH STRATEGIC PRIORITIES:**

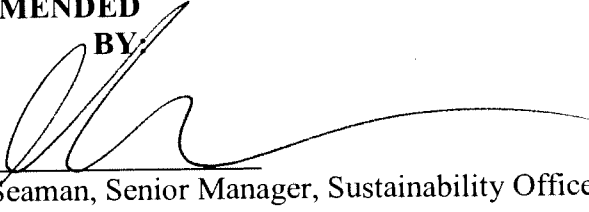
The recommendations contained herein align with the Greenprint and Municipal Services. By lending Council support for renewable energy projects that meet the prescribed criteria Markham is enabling the Greenprint's objective of net zero energy by 2050.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

Planning, Planning Policy, Legislative Services, Operations, Legal and Finance.

**RECOMMENDED**

**BY:**

A handwritten signature in black ink, appearing to read 'Graham Seaman', is written over a horizontal line.

Graham Seaman, Senior Manager, Sustainability Office

**ATTACHMENTS:**

- Appendix 1 – FIT Directive from the Minister of Energy to the Ontario Power Authority
- Appendix 2 – Town of Caledon's municipal support recommendations
- Appendix 3 – City of Mississauga's municipal support recommendations