

## **COMMITTEE OF THE WHOLE – JANUARY 12, 2010**

### **RENEWABLE ENERGY SOURCE – LEASE AGREEMENT WITH POWERSTREAM**

#### **Recommendation**

The Commissioner of Community Services, in consultation with the Director of Building and Facilities recommends:

1. That Council approve the installation of renewable energy source solar power panels on City of Vaughan buildings; and,
2. That the Building and Facilities Department and the Legal Department review the lease agreement and documents and report to Council.

#### **Contribution to Sustainability**

This report is consistent with the priorities previously set by Council in the Green Directions, Vaughan, Community Sustainability Environmental Master Plan, and Objective 1.1:

- To reduce greenhouse gas emissions and move towards carbon neutrality for the City of Vaughan's facilities and infrastructure.

#### **Economic Impact**

The annual lease payment will be determined based on commercial rates. The total kilowatt of each building will be finalized once the installation is completed. There are capital and operating costs associated with this project, and PowerStream have agreed to pay these costs and they will be identified in the agreement.

#### **Communications Plan**

No communication plan at this time with regard to the purpose of this report. There will be a press release issued pending Council approval of this initiative. Staff will also work with PowerStream on a joint press release once installation of the Solar panels are completed.

#### **Purpose**

The purpose of this report is to receive Council approval for the City of Vaughan to enter into an agreement with PowerStream to install renewable energy source solar power panels on suitable City of Vaughan buildings.

#### **Background - Analysis and Options**

The Green Energy Act, 2009 (GEA) have facilitated changes in Ontario energy policy. It increased direct provincial Government involvement in Energy Policy and regulation. It also introduced a new Green Energy Era by facilitating the development of renewable energy projects and mandating conservation targets in Ontario.

Leading utilities like PowerStream are expected to continue their leadership role in the industry and participate significantly in renewable generation. The City of Vaughan also recognizes the need to become a more sustainable community. The City, through its wholly owned subsidiary is the major shareholder in PowerStream. Recently the three shareholders agreed to invest in solar energy. The installation of solar panels on City facilities would demonstrate and promote the installation of solar panels to the private sector. PowerStream is currently exploring opportunities

to install solar panels throughout its service territory. They have approached the City of Vaughan to evaluate our building roofs for the potential for solar generation.

PowerStream agreed to have a solar engineer evaluate the City's buildings, to determine the total solar potential for each building. This was considered Phase 1 of the project and would be taking into consideration the size and type of the roofs, the building orientation for optimum solar exposure, and any roof mounted obstructions that would inhibit solar potential.

The following buildings were evaluated using the criteria stated above:

- Joint Operations Centre
- Vellore Village Community Centre
- Maple Community Centre
- Garnet A. Williams Community Centre
- Father Ermanno Bulfon Community Centre
- Dufferin Clark Community Centre
- Chancellor Community Centre
- New Civic Centre
- North Thornhill Community Centre
- Rosemount Community Centre
- Pierre Berton Library
- Bathurst Clark Library
- Al Palladini Community Centre

Nine of the buildings evaluated were determined to be appropriate for a solar array based on the Phase 1 feasibility studies, and the installations can be completed as Phase 1 of the PowerStream project. The new Civic Centre and the North Thornhill Community Centre currently under construction will need to be confirmed by a pre-feasibility study based on structural drawings to be submitted once the buildings are completed. These building will then be included for installation as part of Phase 1.

Of the buildings reviewed, the findings also confirmed that four buildings are not of an ideal size, shape or roof type for solar panel installation due to available roof space or the requirements for a specialized design. These buildings will not be considered for the phase 1 portion of the project, but may be re-evaluated during the Phase 2 portion of the project.

Although the nine buildings determined to be potential installation sites through the pre-feasibility study, the information is contingent on each roof being capable of structurally supporting the rooftop solar arrays. PowerStream will confirm through a structural engineer's assessment following agreement to proceed involving executed leases for the relevant buildings. Should the structural engineer's analysis determine that a roof is not capable of supporting the additional weight of the solar panels, then that specific building will be removed from the implementation list.

The annual lease payment of each building will be at commercial rates. The installed kilowatts of generating capacity will be finalized by a detailed design and be defined by the Ontario Power Authority (OPA) Feed-In Tariff (FIT) contract, thus the annual lease payment amount may be adjusted upon completion of the solar panel installation. The lease is for 20 years.

### **Relationship to Vaughan Vision 2020/Strategic Plan**

In consideration of the strategic priorities related to Vaughan Vision 2020, the report will provide:

- **STRATEGIC GOAL:**  
Service Excellence - Providing service excellence to citizens.  
  
Management Excellence – Providing excellence in the management of our city.
- **STRATEGIC OBJECTIVES:**  
Pursue Excellence in Service Delivery – Deliver a high quality of services within approved service standards to all City stakeholders.  
  
Enhance Productivity, Cost Effectiveness and Innovation – To develop and implement innovative solutions and technological infrastructure, providing enhanced productivity and operational efficiency.

This report is consistent with the priorities previously set by Council, however, and the necessary resources to undertake this initiative will be the responsibility of PowerStream.

### **Regional Implications**

None.

### **Conclusion**

The Commissioner of Community Services and the Director of Building and Facilities have reviewed the pre-feasibility study and are in agreement with the findings. It is in the best interest of the City to participate in this venture as it's a highly visible green initiative to reduce carbon emissions and implement a renewable energy source. This initiative will apply the principles of sustainability in how we operate as a Corporation, and help the City achieve our commitment to Service Excellence and to build a great sustainable community.

### **Attachments**

None.

### **Report Prepared By**

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Respectfully submitted,

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