

#### POLICY NUMBER: PUBLIC WORKS-014

# SUBJECT: GreenFleet Policy for the Engineering and Operational Services Commission

#### POLICY STATEMENT:

The Engineering and Operational Services Commission recognizes it has a responsibility to help protect the environment and is committed to adopt economic and environmentally sustainable 'GreenFleet' management practices for its corporately operated fuel powered equipment and supporting services to reduce the overall environmental impact.

#### **OBJECTIVES:**

- Decrease the consumption of non-renewable resources.
- Decrease greenhouse gas emissions.
- Implement sustainable environmentally friendly fleet management.

#### RELATED POLICY PROCEDURES/GUIDELINES:

#### 1.0 **DEFINITIONS**

- 1.1 Fleet A collection of vehicles and/or fuel powered equipment owned or leased by the Corporation.
- 1.2 Life-Cycle Costs Refers to the total cost of ownership over the life of an asset and valuation of the environmental impacts of a given product or service caused or necessitated by its existence.

- 1.3 Baseline The resource (i.e. diesel fuel, unleaded fuel, oil, etc.) that the Fleet, or Fleets, consumes in its current condition. The baseline will provide a reference to compare future use against to determine the effectiveness of conservation efforts.
- 1.4 Benchmark To compare resource consumption related data and management practices with similar operations in order to help guide operations towards greater efficiency.
- 1.5 Best A technique, method, process or activity that is believed to be more effective at delivering a particular outcome than any other technique, method, and process when applied to a particular condition or circumstance.

#### 2.0 GUIDELINES:

- 2.1 Complete an annual Fleet review to eliminate or redeploy unused or underutilized equipment.
- 2.2 Promote sharing or rotating vehicles and equipment across departmental lines wherever possible.
- 2.3 Implement a vehicle and equipment replacement programs to phase out less efficient and/or improperly sized models.
- 2.4 Make every effort to purchase and use the lowest emission vehicle or equipment item possible, while taking into account the vehicle's Life-Cycle Costs and the ability to support operations and services.
- 2.5 When developing product and service procurement terms and conditions of acquisition ensure that environmentally friendly options are incorporated wherever feasible.
- 2.6 Integrate environmentally sustainable best management practices into existing operational and maintenance procedures.
- 2.7 Encourage anti-idling and prohibit idling wherever feasible.
- 2.8 Optimizes fuel efficiency and minimize wear of vehicles/equipment through operator training that is repeated at regular intervals.
- 2.9 Develop and maintain a resource use Baseline to evaluate and benchmark performance.

2.10 Explore available funding opportunities to reduce the financial impact on City

budgets.

- 2.11 Financial savings from reduced consumption and increased efficiencies will be used to comply with policy objectives.
- 2.12 Ensure that any measures taken meet federal and provincial regulations and required technical standards.
- 2.13 Adhere to a continuous improvement process in achieving these objectives.

## 3.0 SCOPE OF APPLICATION:

- 3.1 This policy applies to the Engineering and Operational Services Commission. It is focused on fleets and fuel powered equipment owned and/or operated by the Commission. Encouraging environmentally friendly or GreenFleet practices for businesses in the City is outside the scope of this policy.
- 3.2 The policy will systematically implemented across the Engineering and Operational Services Commission.
- 3.3 Fleet Services will work with each Department within the Engineering and Operational Services Commission to develop a GreenFleet Action Plan ("Action Plan") that will set out the manner of implementation of the policy. The Department Action Plan may be amended from time to time, as required, by the General Manager, Engineering and Operational Services, or designate, in order to effectively apply the policy.

### 4.0 **RESPONSIBILITIES**:

4.1 Fleet Services in coordination with Department Directors will be responsible for the implementation of the Policy through the GreenFleet Action Plans.

The Environmental Services Department will assist with the coordination and initiation of projects set out in the Action Plans necessary to achieve the Policy objectives.

Date of Enactment: April 19, 2010	Related By-law Number/Staff Report Number: EN2010-001 70-2010 (consolidation)
Review and Amendment Dates: June 2010 (consolidation)	Department Responsible for Review:
	Energy Conservation Committee (ECC)
Date of Next Review: 2013	Applicable Legislation/Legislative Authority:

## Appendix B – Fleet Accomplishments

Depa	artment	Project	Savings
	Public Works & Pollution Control	Two hybrid SUV's purchased in 2009	Obtained \$4,000 in tax rebates
Fleet & Operating Services		Aggressive bus replacement program reduced the average age of the fleet from 18.5 yrs old in 2001 to 4.2 yrs old in 2010. A total of 28 replacement units and 2 expansion units have been purchased between 2001 and 2010.	Created greater efficiencies and reliability.
	Transit	Purchased 5 new hybrid buses for delivery in 2010	Studies have indicated that hybrid buses offered on average, a 20% improvement in fuel economy over standard diesel buses
		2002 was the City's first introduction to onboard air-conditioning and auxiliary heating system, which has become the standard. Tinted windows reduce the heat sink effect and the auxiliary heaters reduce idle warm up times	All add to the comfort of the passengers and maintain operational efficiencies without increased fuel usage. Inefficient and overtaxed air conditioning/heating systems can reduce fuel efficiency by up to 20%
	Transportation Services	Introduction of transit in the northwest industrial area. Improved public transportation is critical to decreasing City-wide greenhouse gas emission.	Recent surveys show 8-10% transit use in peak hours compared to an average of 2- 3% for the rest of the City.
		Improved Saturday service from one hour to half an hour	Resulting in a 25-30% increase in transit use on Saturdays. Also, higher transit use will result in the City of Brantford receiving a higher allotment of the annual provincial gas tax funds.

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Department		Project	Savings
	Transit	Since 2002, wherever possible, oil analysis is being performed instead of automatically changing engine and transmission oils	The cost of oil analysis during a scheduled maintenance inspection for a transmission is approximately \$18.00. The cost of servicing that transmission (replacing the oil and filter) prior to the oils life expectancy is approximately \$306.00 in parts plus the labour and down time component
Fleet & Operating Services		Utilizing retreaded tires to minimize tire waste going to landfill and reduce our carbon footprint.	Purchase price of tires is reduced, promotes tire recycling and decreases waste fees
		Moving to an alternative tread pattern on transit tires optimizes movement through snow to maintain fuel efficiency	Up to 5% of fuel economy can be lost due to poor road conditions
		Since 2003 a fluorescent tube recycling program and an oil filter return program has been in effect	Minimizes hazardous waste to landfill
		Since 2003 a less aggressive parts washing solvent and environmentally friendlier bus soap has been used	Moving towards 'green' products for environmental sustainability
		Since 2005 all buses have been ordered with disc brakes.	This extended brake life, reducing the parts and labour component and associated costs.
		Mid 2006 all diesel vehicles, including transit, switch to burning ultra low sulphur diesel fuel	This reduction in the sulphur content in the fuel, from 500 to 15 parts per million, resulted in decreased values in all emission testing and associated environmental impact.