



Building Markham's Future Together  
Journey to Excellence

# 'AVAC Feasibility Working Group' Program Update

General Committee  
Presentation  
June 16, 2014





## March 31, 2014 Working Group Meeting

- Presentation by ENVAC
- Staff to prepare Mission Statement and Guiding Principles

## May 9, 2014 Working Group Meeting

- Presentation by Renewaste – Metro Taifun
- Approval of Mission Statement and Feasibility Analysis
- Decision to prepare Feasibility Analysis to define key issues



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## Mission Statement

*To develop sustainable, compact and complete communities incorporating healthy active living, excellence in community design, efficient infrastructure, housing choices for all and facilities and services meeting community needs including a range of travel choices.*

*Introduce new green infrastructure technologies and best practices in sustainable community and open space design with an emphasis on air and water quality, water and energy efficiency, and conservation and efficient waste management practices.*



- *The rising costs of energy and negative effects of fossil fuel combustion on air quality and climate have created the need for a comprehensive approach to achieve energy sustainability in Markham. Markham will continue to take a leadership role in achieving the sustainable management of energy resources.*
- *To increase adaptability in the community through the introduction of green infrastructure (water, waste, energy) innovative technology, resource conservation, and other sustainable practices to address long term climate change impacts*



- *Markham's communities will be planned to achieve sustainable development by providing policy direction that can result in the maximization of environmental resource conservation, energy efficiency, and the reduction of green house gas production as well as improving air, soil, and water quality*
- *To seek appropriate and innovative design solutions to address waste management requirements in multi-storey buildings including 3-stream collection”*



## Guiding Principles

### FISCAL RESPONSIBILITY

- Use life-cycle cost accounting of environmental impacts including carbon reduction benefits
- Consider all system ownership and funding models including utility/user fees to pay for site infrastructure
- Recognize that least cost decision making may not be conducive to achieving sustainability
- Commit to neutral impact to tax base

### ECONOMIC DEVELOPMENT & INNOVATION

- Pursue innovative solutions and embrace best available technology for community and infrastructure design
- Selected system should reinforce Markham's role as a municipal leader and innovator in an increasingly competitive global marketplace
- Selected system should promote and create future economic development opportunities



## Guiding Principles

### SUSTAINABILITY

- System must maximize waste diversion to meet or exceed approved 80% diversion target
- Consider systems that make it easy and convenient for residents and businesses to reduce their carbon footprint in their day to day activities
- Explore closed loop systems to manage waste materials within the development with emphasis on local solutions
- Factor both local and long distance impacts on people and ecosystems

### ADEQUATE SCOPE

- Adopt a time horizon long enough to ensure proper system planning and design
- Consider scalable pilot projects to assess feasibility
- Identify all potential partners and partnership models from the beginning of the development process



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## Feasibility Analysis

Working Group agreed that a Feasibility Analysis is required to

- Prepare system costs
- Access diversion opportunities
- Options for ownership and fee
- Potential developments including Markham Center

Capital Project be established with upset limit of 50K for technical support



## Recommendations

- That the report entitled "AVAC Feasibility Working Group – Status Update " be received;
- That the AVAC Working Group Mission Statement and Guiding Principles be endorsed
- That the AVAC Working Group develop a Feasibility Analysis study with input from all key stakeholders to determine AVAC system costs, benefits, funding and ownership options and report back to General Committee in Q1 2015.
- That a new Capital Project for the Feasibility Analysis be approved with an upset limit of \$50K to be funded from Markham Environmental Sustainability Reserve Fund.