

TTC Corporate Policy - Green Procurement

Meeting Date: July 10, 2008

Subject: TTC Corporate Policy - Green Procurement

Recommendation

It is recommended that the Commission approve:

- a. TTC Corporate Policy – Green Procurement, which is attached as Appendix A;
- b. the addition of one Senior Buyer's position commencing September 2008 to co-ordinate/facilitate the implementation of the Green Procurement Policy throughout the Commission; and
- c. the authorization of an additional \$450,000 in unbudgeted expenditures for the issuance of a purchase order amendment to Canadian Centre for Pollution Prevention which increases the total contract upset limit to \$525,000 for Phase 1 of the Green Procurement Policy implementation.

Funding

No funds or staff resources have been included in any of the TTC's 2008 budgets for the impact of the Green Procurement Policy. Consequently, Commission authorization is required as outlined in the Recommendations.

Background

In May 2007 the Commission directed staff to retain the services of a consultant to assist in the development of a Green Procurement Policy. Following a competitive procurement process, on August 3, 2007 staff awarded a contract in the upset limit amount of \$75,000 to the Canadian Centre for Pollution Prevention (C2P2) to assist in the development of a Green Procurement Policy as well as an initial implementation plan. In addition, the successful proponent would subsequently assist the Commission in the roll-out of the approved plan and the cost for this work would be the subject of a future purchase order amendment.

At its meeting of December 6, 2007, the Commission approved a motion to direct staff to submit a Green Procurement Policy for approval in 2008 in order to make environmental improvements to purchasing practises.

Discussion

A working group consisting of representatives from the following departments; Materials and Procurement, Engineering, Plant Maintenance, Signals/Electrical/Communications and Safety worked

with the consultant in the development of the Green Procurement Policy (GPP) and implementation plan. As a first step and to determine whether any pre-existing approaches were available to facilitate the implementation of the Commission's GPP, C2P2 surveyed transit properties in North America and Europe to determine the current status of the implementation of green procurement policies and practises in transit properties.

Their findings indicate that while many organizations in North American have a GPP, currently there are relatively low levels of actual green procurement activity, including those considered to be leaders in the transit industry (e.g. Sound Transit Authority, Washington State, Massachusetts Bay Transportation Authority (MBTA), Bay Area Rapid Transit (BART), etc.). Further, none of these organizations have actually implemented a GPP.

In many European countries more progress has been made in the implementation of green procurement practices, however only a few transit authorities were found to have an explicit policy on green procurement as in most cases such requirements were initiated by national, state or local governments and transit authorities were required to follow such requirements. Therefore, staff has determined that a pre-established methodology to successfully implement a Green Procurement Policy does not currently exist.

The TTC is a large, diverse and complex organization that has hundreds of staff involved to varying degrees in the purchase of a very wide variety of requirements (e.g. revenue/non revenue vehicles, various buildings and structures above/below ground, tens of thousands of stock and non stock parts, hundreds of services covering a very wide variety of requirements, a broad range of engineered equipment, etc.).

While TTC staff is already fully occupied in executing purchases based on the current procurement policy, significant and noteworthy progress has been made across the Commission regarding a number of environmental issues including: reducing air emissions, reducing the use of hazardous materials and the amount of solid waste produced, increasing solid waste recycling, improving fuel tanks and fuel management, soil and ground water remediation, reducing waste water, improving the energy efficiency of revenue/non revenue fleets, increasing energy conservation initiatives, piloting green building initiatives.

A GPP potentially introduces new and complex issues for considerations that have previously not been factors in past TTC purchases (e.g. origin/source of raw materials, manufacturing methods/efficiency, source/nature of power used in manufacturing, recycled content of material, material itself partially/wholly recyclable, packaging considerations [e.g. weight, energy efficiency, reusable, recyclable, etc.], method of delivery [i.e. fuel efficiency, total distance travelled, source/type of fuel

used, etc.], life cycle costing, audit/verification process, etc.).

The implementation of a GPP has the potential to affect virtually every purchase made by the Commission and the sheer scope of this undertaking could be overwhelming unless a long term, progressive and incremental approach is taken for the implementation of GPP over a number of years. Success will also require a culture change in the thinking of management and the affected staff across the Commission in the approach taken to purchases. Further, as there are potentially both staffing and financial considerations involved in the implementation of the GPP, staff will need to work within budget frameworks and ensure that day to day procurement activities proceed in order to ensure the continued safe operation of the Commission.

In addition, to a significant extent both the timing and degree of success in the implementation of the GPP will depend on current/future industry and technological advances. Therefore, the Commission needs to work with and encourage the industry to include green procurement considerations in the design and manufacture of products and to make more green products/services available.

A GPP corporate steering committee will be required with senior management representatives from key departments to oversee Commission-wide implementation as will a working group to establish the requirements and develop the detailed plans and schedules for the implementation of the GPP. The working group will also assist departments with specific GPP implementation issues.

Part of the implementation of the GPP will include a review of the procurement process itself to ensure that it is carried out with consideration to sound environmental practices (e.g. reduce overall use of paper; use only 100% recycled paper; maximize use of the internet and email to communicate with bidders and distribute information; electronic bid documents, addenda and bids; archiving files electronically; etc.).

There are also a number of key issues that need to be addressed as part of the implementation, these include revising the bid evaluation criteria to include environmental considerations and then determine the appropriate weighting (e.g. reserve a percentage of weighting for environmental considerations for purchases, as appropriate). As part of the contract administration process, it will be necessary to develop appropriate techniques/methods to verify or audit purchases (as required) to ensure suppliers' conformance to environmental requirements.

The best approach to implementing a GPP is to include green procurement considerations into the description of the requirements or specifications prior to tendering. However, most of the existing staff involved in preparing specifications do not currently possess the practical knowledge, training or tools required to properly address these considerations in the specifications. Therefore, a plan is required to

develop and implement the new methodologies, procedures, skills and tools that staff will require to successfully incorporate Green Procurement considerations into specifications.

Commission departments would then be capable of and responsible for establishing annual goals and objectives to introduce green procurement considerations into their purchases that would be included in the appropriate Operating or Capital budget. Goals with longer implementation periods (i.e. over several years) would be subject to annual review, similar to the capital budget process. As part of the budget process, departments would also assess the fiscal impact of environmental considerations and develop the required justifications for any budget impacts related to implementing green procurement initiatives.

A communication plan would need to be developed to communicate to staff the potential impact that the GPP would have on Commission purchases and to provide specific training as required (e.g. training in the preparation of specifications that include environmental concerns) and to promote GPP issues within the Commission and with our major vendors as well as the industry in general. The communication plan would also include a database of GPP purchases to track and report GPP successes so they can be shared across the Commission and with other transit and government organizations.

Staff is also proposing to work with other transit and government organizations to both share our experiences and benefit from progress that other organizations may have made in implementing green purchases. This would be combined with ongoing communication with the industry on technological and other developments that enhance environmental considerations. This combined effort could assist the continued development of standardized environmental specifications for similar products to ensure consistent quality and to reduce the cost of goods purchased through standardization across a number of organizations.

An additional consideration relates to the limited number of products/materials currently manufactured based on green procurement best practises and that competition is also currently limited. Therefore, in staging the implementation of purchasing products based on the GPP, it is important to avoid unnecessarily restricting competition as it could result in significantly higher pricing if we are unable to obtain competitive pricing. To alleviate this situation in the short term and to facilitate early progress, staff has identified some types of purchases, which could be more readily implemented as the products/materials have been pre-approved as environmentally preferable products that meet strict third party government or industry environmental standards (e.g. Environment Canada's EcoLogo Program certifies 3000 products and services that meet their standards, Forest Stewardship Council Approves 100% recycled paper to ensure it conforms to appropriate environmental considerations, etc.). A preliminary analysis of TTC requirements identified 34 items that match EcoLogo certified products (e.g. lumber, engine antifreeze, copier paper, various janitorial products, toilet tissue, etc.).

Staff has also identified a number of purchasing options that would be used for initial life cycle costing analysis to assist in the eventual development of Life Cycle Costing models (e.g. asphalt vs. concrete, 30% or 100% recycled paper vs. non recycled paper, cost/benefit of different grades of graphite used in brushes in electric motors and power conductors, potassium acetate in lieu of sodium products for road salt, etc.). This is a very important aspect of the GPP implementation as it would establish the types of parameters that would apply to comparing initial financial cost versus the short/long term environmental benefit. Staff is planning to use this analysis to start to develop cost/benefit models that could be used to assist in guiding other green procurement decisions in the future.

The implementation will be undertaken in two phases:

Phase 1:

This phase consists of activities that will set up the organization, infrastructure, and establish the communication links required to roll out the implementation of the GPP, which includes the following:

- Establishing the committee structure to drive the GPP implementation,
- Adding one Senior Buyer's position as of September 2008 to act as lead in performing work related to the implementation of GPP,
- Determining additional staff resources required for Phase 1,
- Determining training requirements, developing training materials and carrying out training of staff as required, (e.g. general awareness training, specification preparation training, etc.),
- External capacity building/outreach regarding GPP awareness with major vendors,
- Identifying and establishing partnerships with other transit and government organizations,
- Completing Life-Cycle Costing analysis on test issues and developing preliminary life cycle costing models,
- Integrating environmental considerations into the specifications for selected purchases,
- Developing a communication plan and GPP database requirements,
- Establishing the plan and schedule for Phase 2 involving the long-term implementation of the GPP,
- Reporting back to the Commission on the status of the implementation of the GPP.

As noted above, an additional Senior Buyer's position will be required commencing September 2008 and the future need for this position will be reviewed in 2009 as part of the 2010 Operating Budget process once Phase 1 is complete. This position is required to co-ordinate and facilitate the implementation of the GPP across the Commission. Their role will be to promote and encourage the implementation of GPP initiatives and provide guidance and advise to facilitate implementation by other departments. Further, they will be responsible for developing and implementing GPP initiatives for the Materials and Procurement Department, which will be included in the department's goals and objectives. Finally, this

position will also be responsible for the purchase of energy for the Commission consisting of bio-fuel/diesel, electricity and natural gas. These purchases have become increasingly important to the Commission over the last number of years due to the significant increases in the cost of energy. In addition, these purchases have increased in complexity and require constant monitoring to remain current on changing market pricing and the issues/developments that affect such pricing.

Staff has finalized a draft Work Plan and cost in the upset limit amount of \$450,000 for the work C2P2 will be required to perform to support the Commission in completing the implementation of Phase 1. This upset limit amount includes an allowance of approximately 10% for additional work which may be required to be performed during Phase 1.

It is expected that the implementation of Phase 1 will be completed within 10 to 12 months and further, it is intended to complete certain elements of the implementation in sufficient time to permit the key departments to estimate the impact of GPP on their purchases and include such impact in the appropriate budgets for 2010, as required.

Phase 2:

Phase 2 will include a plan and schedule that defines the requirements and estimates the costs for a progressive and sustained approach to the implementation of the GPP that will include environmental considerations into all appropriate Commission purchases.

Justification

The implementation of a GPP will ensure that environmental issues are considered when making purchases in the future and that the Commission is taking an environmentally responsible approach to its procurement activity.

July 2, 2008

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Attachment - Appendix 'A'