



STAFF REPORT ACTION REQUIRED

Update and Revisions to the Toronto Green Standard: Performance Measures for Sustainable Development

Date:	September 22, 2009
To:	Planning and Growth Management Committee
From:	Chief Planner and Executive Director, City Planning
Wards:	All
Reference Number:	Pg090032

SUMMARY

The purpose of this report is to provide a review of proposed revisions to the Toronto Green Standard prior to its launch January 31, 2010. Revisions proposed in this report reflect additional feedback from the development industry; City By-laws adopted since the approval of the TGS in 2008 and further review and analysis undertaken during the development of the implementation protocol.

RECOMMENDATIONS

The Chief Planner and Executive Director of the City Planning Division recommends that:

1. City Council adopt the revised two-tiered set of performance measures associated with the Toronto Green Standard as presented in Appendix A, to be applied to all applications under the Planning Act

Financial Impact

The recommendations of this report have **no** financial impact beyond what has already been approved in the current year's budget.

DECISION HISTORY

In December 2008, City Council adopted the two-tiered set of performance standards for sustainable development called the Toronto Green Standard (formerly known as the Toronto Green Development Standard). Council also adopted a recommendation

directing the Chief Planner to develop an implementation protocol for the application of the Standard by September 2009.

<http://www.toronto.ca/legdocs/mmis/2008/pg/bgrd/backgroundfile-16862.pdf>

ISSUE BACKGROUND

Prior to implementing the TGS, minor revisions to the performance targets are being recommended based on development industry and stakeholder feedback, the development of the Toronto LEED Supplement and the passing of the Development Charges By-law and the Green Roof By-law.

COMMENTS

The Toronto Green Standard (TGS) incorporates a two-tiered structure that focuses on performance measures for new development that address the City of Toronto's unique environmental pressures including: improved air quality, energy use and climate change (greenhouse gas reductions), water quality, quantity and efficiency, ecological protection and enhancement and solid waste diversion and reduction. There are three versions of the TGS to reflect the range of development occurring in the City of Toronto: Mid to High Rise Residential, Industrial, Commercial and Institutional; Low-rise Residential and Low-rise Non-residential.

The TGS consists of two tiers of performance measures. Tier 1 of the TGS focuses on those elements of sustainable development that can be secured through the Planning Act processes. Tier 1 measures include exterior sustainable design, landscaping, site level infrastructure features (such as automobile, cycling and pedestrian infrastructure). Tier 2 establishes higher performance targets for green buildings and includes matters outside of what can be secured under the Planning Act. Tier 2 will be secured through an agreement resulting from the Development Charge Refund incentive.

Proposed Revisions to the TGS

Toronto LEED Supplement

The Toronto Green Standard and the Leadership in Energy and Environmental Design (LEED) rating systems are different programs to encourage sustainable development that overlap in some areas. The Toronto LEED Supplement addresses the areas where the two overlap for those builders who would like to achieve both certification systems. The City is working with the Canada Green Building Council (CaGBC), who administers the LEED rating systems, to develop the Toronto LEED Supplement as a component of the TGS implementation package. The Supplement allows LEED registered projects to receive credit for achieving the TGS simultaneously. As part of this work, a peer review of the TGS was carried out by the CaGBC and has contributed to these changes.

Minimum Energy Performance

Following the approval of the TGS by Council in 2008, additional feedback was received from the development industry and other stakeholders related to the practical application of the TGS and the structure of the standards. An analysis of recent data conducted by the Energy Efficiency Office (EEO) in conjunction with City Planning recommends an as-constructed target of 35 percent improvement over the Model National Energy Code for Buildings (MNECB) to obtain the Tier 2 target. The analysis of condominium buildings that have participated in the EEO Design Assistance Program indicated that buildings that are designed to achieve an improvement of 40 percent over MNECB actually deliver 5 to 12 percent less in as-built energy savings on completion of the as-built review. Establishing an as-built target ensures that the desired minimum energy performance levels are achieved for all Tier 2 buildings. As a result it is recommended that the target be revised to an as-built improvement of 35 percent above MNECB.

Other Revisions- Tier 1

The recommendation to make revisions to the TGS performance targets reflect the review and analysis that has been outlined above as part of the development of the implementation package for the TGS. Further, the completion of the proposed new Zoning By-law for the City of Toronto and the adoption of the Green Roof By-law in 2009, require that the TGS be amended to be consistent with the By-laws.

This report provides an overview of the recommended revisions. Standards that have been added, removed or significantly revised for Tier 1 of the TGS include (See Appendix A for the complete revised TGS):

- Automobile Infrastructure/Cycling Infrastructure: Revised to be consistent with the standards proposed in the new Zoning By-law
- Urban Heat Island: Roof: Revised to be consistent with the Green Roof By-law
- Energy Efficient Fixtures and Appliances: Target requiring occupancy sensors for walkways and stairs has been removed to be performance based as opposed to prescriptive to achieve energy efficient use of fixtures.
- Glass and other Design Features for Migratory Birds: A target has been added to require the treatment of glass adjacent to any green roof
- Light Pollution: Revised to respond to comments from the CaGBC suggesting less prescriptive targets focused on light pollution.
- Storage and Collection of Recycling and Organic Waste: Targets added to specify size and general location of recycling facilities

Other Revisions- Tier 2

Standards that have been added, removed or significantly revised for Tier 2 of the TGS include (See Appendix A for the complete revised TGS):

- Automobile Infrastructure: Tier 2 targets have been removed based on comments from the CaGBC and stakeholders

- Minimum Energy Performance: Revised to require buildings to be designed and constructed to be 35 percent better than the MNECB
- Minimum Energy Performance: Revised to require in-suite smart meters for residential buildings to replace prescriptive appliance requirements
- Energy Efficient Fixtures and Appliances: It is proposed that the targets be integrated into development features for Minimum Energy Performance and Light Pollution.
- Water Efficiency: Revised to be performance based as opposed to prescriptive to achieve Water Efficiency
- Light Pollution: Revised to be performance based as opposed to prescriptive to address light pollution from non-residential buildings.

Tier 2 of the TGS will be applied to builders who are participating in the Development Charge Refund program. A development must achieve all of the high priority Tier 2 performance measures as identified by a “►” symbol in Appendix A, and three of the remaining Tier 2 measures to qualify for the refund. High priority targets are those that City Council has identified as of high importance through City policies and programs to address the urban heat island effect, energy consumption and water use.

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SIGNATURE

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ATTACHMENTS

Appendix A: Toronto Green Standard - Mid to High Rise Residential, Commercial, Industrial and Institutional Development
 Appendix A: Toronto Green Standard - Low-Rise Non-Residential Development
 Appendix A: Toronto Green Standard - Low-Rise Residential Development

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