

THE WHITBY GREEN STANDARD



Whitby Sustainability Advisory Committee – April 5, 2023

Sarah Shields, MREM

Project Manager – Sustainability & Climate Change

Goal & Purpose of Green Standards

Green development standards are a tool to guide development through the planning and design process that focuses on the community as a whole to encourage sustainable community design.

Goal: Encourage the inclusion of sustainability measures for new development in order to improve their environmental performance.

The **purpose** is to:

- promote sustainable site and building design to increase community resiliency;
- support reduction in greenhouse gas emissions to mitigate effects of climate change; and
- provide a “one stop shop” for navigating municipal sustainability policy, plans & strategies in new development, ensuring alignment with the Town of Whitby Sustainability & Climate Change goals.

By the Numbers

The WGS is a tiered program designed to tackle upfront emissions caused by construction as well as operating emissions.

21%

21% of global emissions are caused by **constructing** new buildings.



28%

28% of global emissions are caused by **operating** buildings.



13.5

Reducing emissions of one house is equivalent to taking up to 13.5 cars off the road each year.



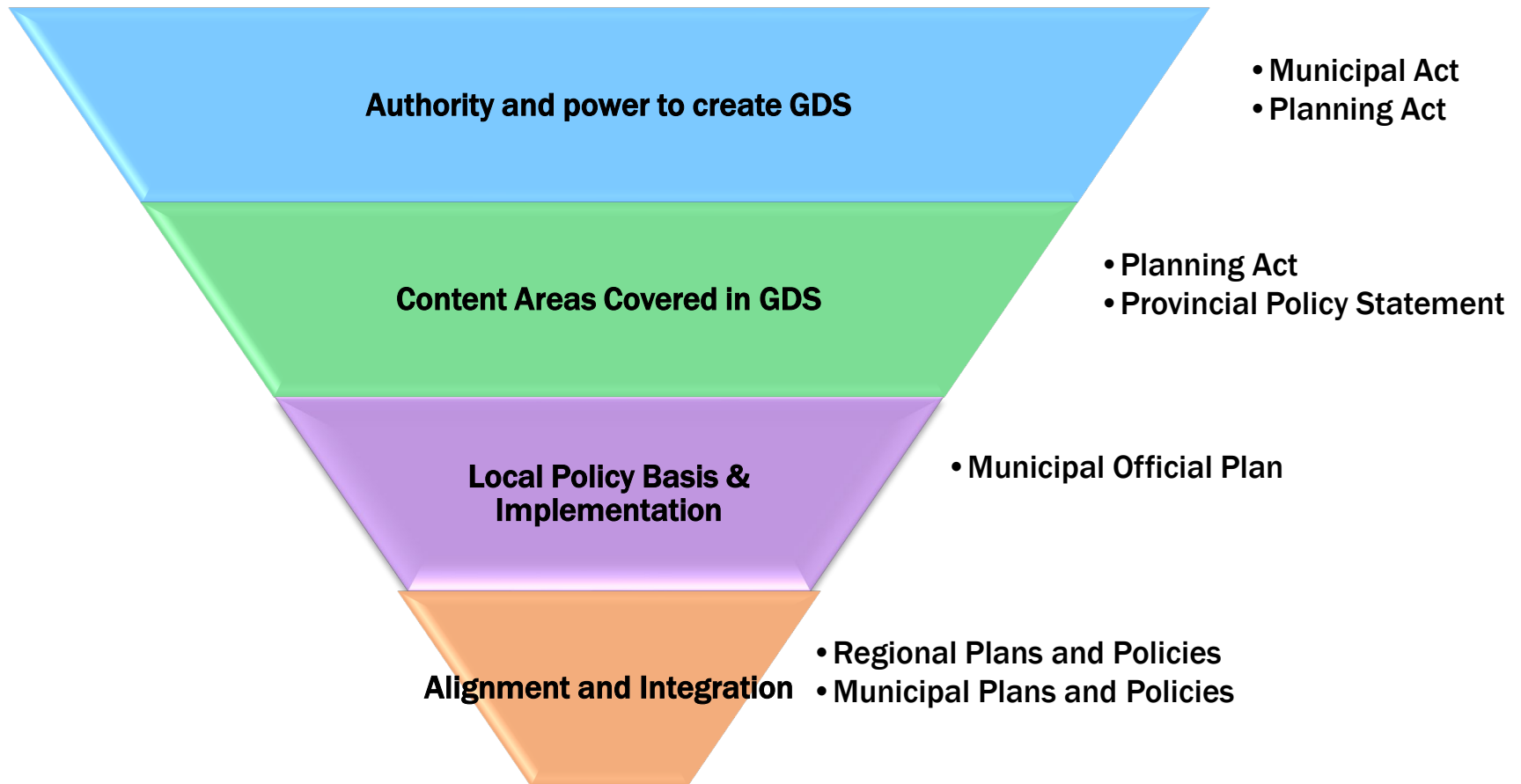
Impacts of New Construction & Operating Emissions

Benefits of the Whitby Green Standard

Green Standards will contribute to:

- ✓ a more resilient building stock
- ✓ mitigating climate change impacts
- ✓ improving energy efficiencies
- ✓ efficient infrastructure use
- ✓ reducing automobile dependence
- ✓ encouraging physical activity
- ✓ reducing potable water usage
- ✓ lower greenhouse gas emissions
- ✓ recognizing the positive impact of greenspace and vegetation

Legal Authority for Green Development Standards



Enabling Policies

TOWN OF WHITBY

Official Plan

Office Consolidation, August 2021




whitby.ca/officialplan



THE WHITBY GREEN STANDARD

Whitby Green Standard Tools



Whitby Whitby Green Standard (WGS), Version 1
Site Plan Application: Checklist

Instructions
At a minimum, all new Site Plan applications submitted to Whitby under the Planning Act must demonstrate compliance with Tier 1.

Tier 1: A compliant WGS submission includes achievement of all Site Plan Application Tier 1 Performance Criteria and the submission of all related referenced plans, drawings and studies.

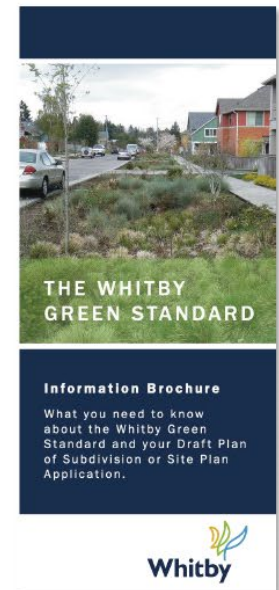
Tier 2: A compliant WGS submission includes achievement of all Site Plan Application Tier 1 and Tier 2 Core Performance Criteria and the submission of all related referenced plans, drawings and studies. In addition, you must achieve three (3) Voluntary Measures. Up to two (2) Innovation Performance Measures may be used in lieu of two (2) Voluntary Measures.

Tier 3: A compliant WGS submission includes achievement of all Site Plan Application Tier 1, Tier 2 Core, and Tier 3 Core Performance Criteria and the submission of all related referenced plans, drawings and studies. In addition, you must achieve six (6) Voluntary Measures. Up to two (2) Innovation Performance Measures may be used in lieu of two (2) Voluntary Measures.

Tier 4: A compliant WGS submission includes achievement of all Site Plan Application Tier 1, Tier 2 Core, Tier 3, and Tier 4 Core Performance Criteria and the submission of all related referenced plans, drawings and studies. In addition, you must achieve nine (9) Voluntary Measures. Up to two (2) Innovation Performance Measures may be used in lieu of two (2) Voluntary Measures.

Property and Applicant Information
Site Plan Application number:
Project name:
Address of subject land:
Applicant name:
Email address:
Phone number:
Registered owner:

Performance Tier
Choose performance tier (if macros are enabled, clicking the circle will open the corresponding checklist)
☐ Tier 1 ☐ Tier 2 ☐ Tier 3 ☒ Tier 4

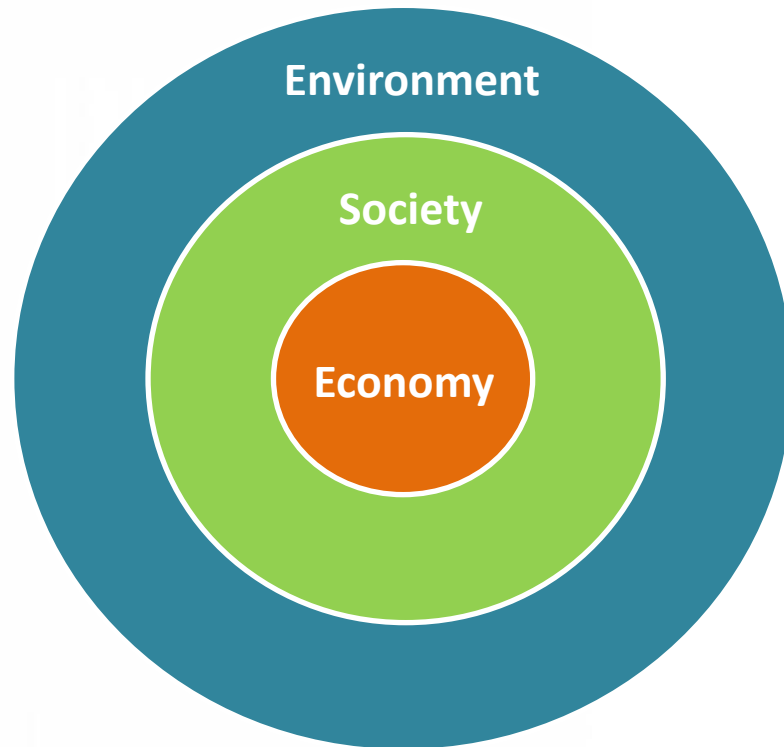


- Two Checklists
 - Site Plan Checklist
 - Plan of Subdivision Checklist

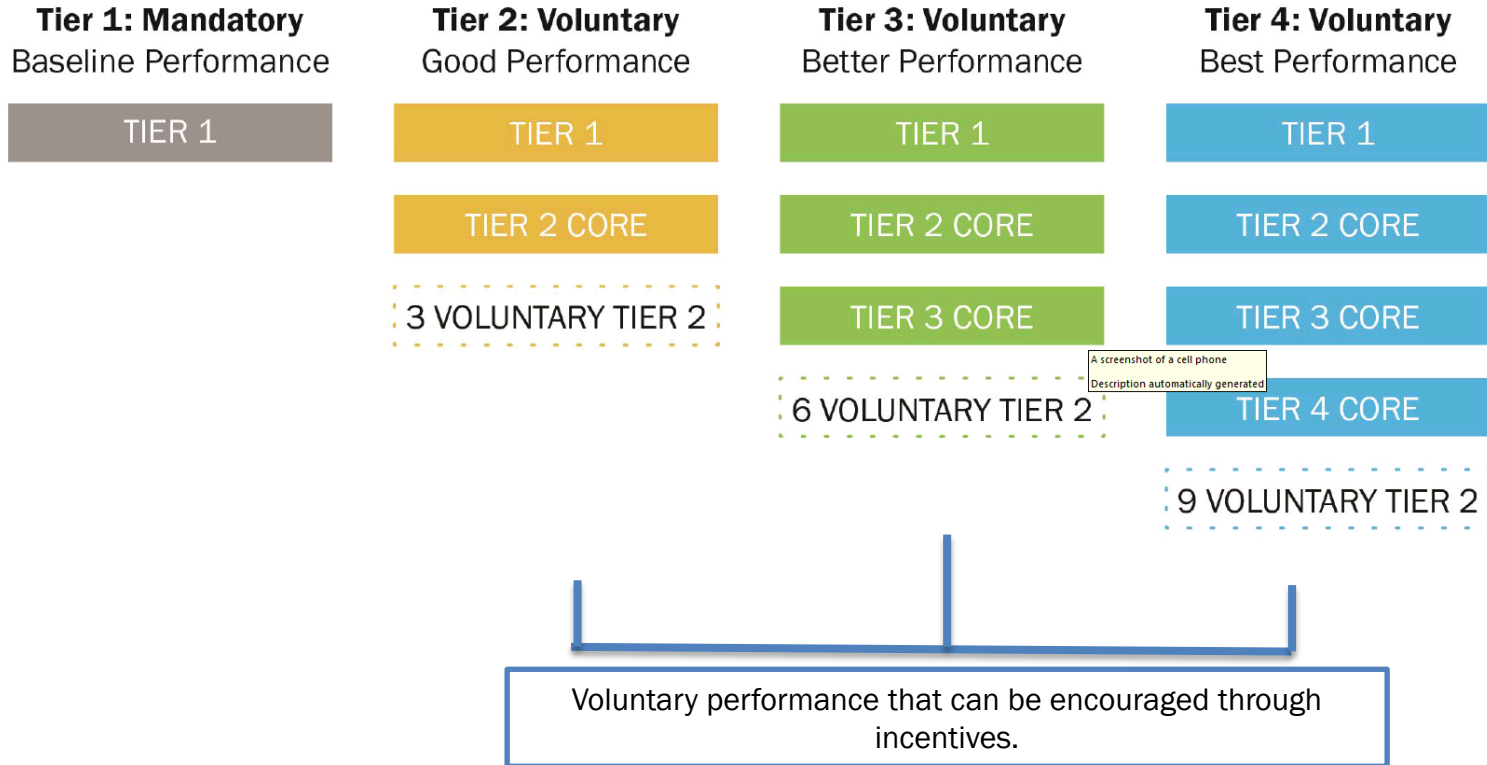
Reference Guide

Brochure

Whitby Green Standard - Themes



Whitby Green Standard Checklist





Whitby Green Standard (WGS), Version 1 Site Plan Application: Checklist

Health and Happiness: Encouraging active, sociable, meaningful lives to promote good health and wellbeing.

Performance Measure(s)						Plans and Drawings	Applicant Comments	N/A (Staff Only)	Responsible Department (Staff Only)
Number	Development Feature	Tier 1 Criteria	Tier 2 Core Performance Criteria	Tier 3 Core Performance Criteria	Tier 4 Core Performance Criteria				
HH1.1	Public or Boulevard Tree	Achieve the requirements of Whitby's Landscape Plan Guidelines for Site Plan and Subdivision Developments Planning and Development Department.				Plan #:			
HH1.2	Access to Parks and Open Space	Provide access to a variety of park and open space options that also with Whitby's Official Plan, which Maintenance				Plan #:			
HH1.3	Parkland	Provide the minimum parkland requirements of the Whitby's Official Plan multiplied by 1.10.	Provide the minimum parkland requirements of the Whitby Official Plan multiplied by 1.15.	Provide the minimum parkland requirements of the Whitby Official Plan multiplied by 1.20.		Plan #:			

Equity and Local Work which support local prosperity and international fair trade.						Plans and Drawings	Applicant Comments	N/A (Staff Only)	Responsible Department (Staff Only)
Performance Measure(s)									
Number	Development Feature	Tier 1 Criteria	Tier 2 Core Performance Criteria	Tier 3 Core Performance Criteria	Tier 4 Core Performance Criteria	Plan #:			
ELE1.1	Affordable Housing	Affordable Housing means: a) in the case of ownership housing, the least expensive of: i) housing for which the purchase price results in annual in costs which do not exceed 30% of household income for low and moderate income households; or ii) a unit for which the purchase price is at least 10% age purchase price of a resale unit in the of rental housing, the least expensive of: i) a unit for which the rent does not exceed 30% of gross annual household income for low and moderate income households; or ii) a unit for which the rent is at or below the average market rent of a unit in the Region.							
ELE1.2	Housing Types and Size	Meet the housing mix objectives of Whitby's Official Plan.							
ELE1.3	Community Safety	Development has consideration for the principles of Crime Prevention Through Environmental Design Principles (CPTED), per Whitby's Official Plan.				Plan #:			

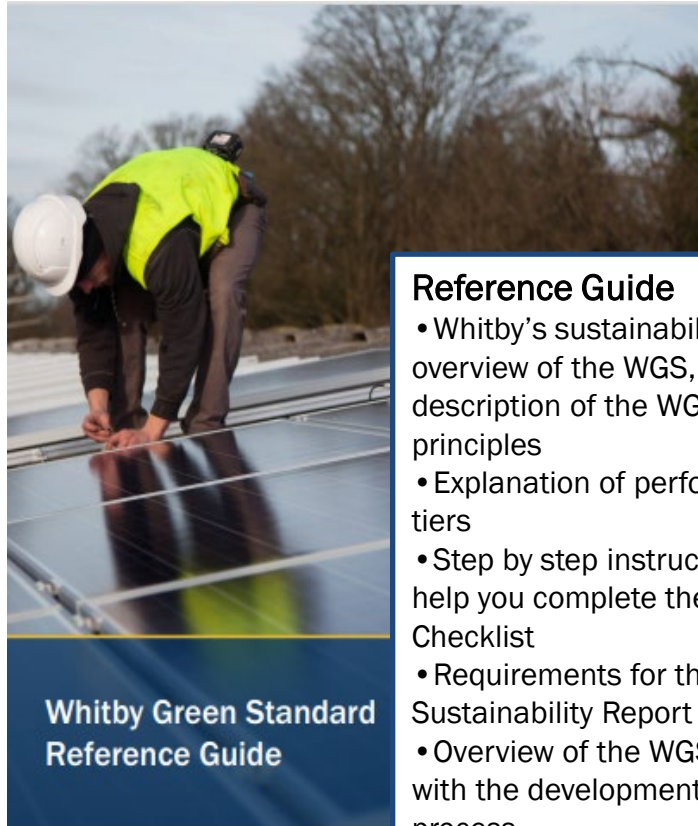
Culture and Community: Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.						Plans and Drawings	Applicant Comments	N/A (Staff Only)	Responsible Department (Staff Only)
Performance Measure(s)									
Number	Development Feature	Tier 1 Criteria	Tier 2 Core Performance Criteria	Tier 3 Core Performance Criteria	Tier 4 Core Performance Criteria				
CC1.1	Art (Within the Site)	Incorporate art into publicly accessible and visible spaces and into building designs as an architectural element, per Whitby's Official Plan.				Plan #:			
CC1.2	Outdoor Amenity Space	Provide public and/or private outdoor amenity spaces, where appropriate, for multi-residential development and non-residential development, particularly for development within Intensification Areas.				Plan #:			
CC1.3	Cultural Heritage Resources	Complete a cultural heritage impact assessment that on, or adjacent to cultural heritage resources that are designated under Part IV or Part V of the Ontario Heritage Act, per Whitby's Official Plan.				Plan #:			
CC1.4	Sustainable Culture		Develop and distribute a sustainability handout to to new residents to understand green/sustainable elements in homes/buildings			Plan #:			

Stepped Approach

Tier 1*	Tier 2	Tier 3	Tier 4
15% improvement above OBC, SB-10, Division 3 (2017); OR	25% improvement above OBC, SB-10, Division 3 (2017)	Total Energy Use Intensity (TEUI), Thermal Energy Demand Intensity (TEDI), and Greenhouse Gas Intensity (GHGI) performance limits. OR target the CaGBC Zero Carbon Building Ready Labelling Standard (ZCBS).	Total Energy Use Intensity (TEUI), Thermal Energy Demand Intensity (TEDI), and Greenhouse Gas Intensity (GHGI) performance limits. OR target the Net Zero Carbon/ Passive House Labelling Standard.

2020	2024	2028	2032
V1 Tier 1			
V1 Tier 2	→ V2 Tier 1		
V1 Tier 3	V2 Tier 2	→ V3 Tier 1	
V1 Tier 4	V2 Tier 3	V3 Tier 2	→ V4 Tier 1 (Net Zero Energy)

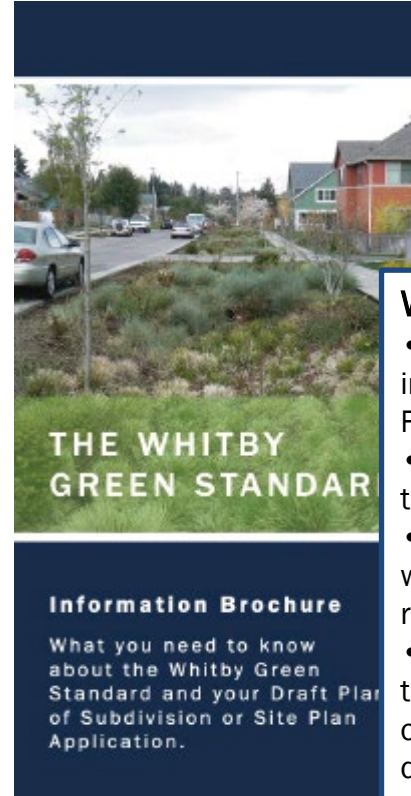
Supporting Documents



Whitby Green Standard Reference Guide

Reference Guide

- Whitby's sustainability vision, overview of the WGS, and a description of the WGS principles
- Explanation of performance tiers
- Step by step instructions to help you complete the WGS Checklist
- Requirements for the Sustainability Report
- Overview of the WGS' interface with the development review process
- Glossary definitions and resources



THE WHITBY GREEN STANDARD

Information Brochure

What you need to know
about the Whitby Green
Standard and your Draft Plan
of Subdivision or Site Plan
Application.

WGS Information Brochure

- Explanation of how the WGS interfaces with the Development Review Process
- An overview of the performance tiers
- An overview of the WGS, including what it is, why it is needed, and the role of the Applicant
- An overview of One Planet Living, the sustainability framework used to organize the WGS' sustainable development principles



PROJECTS TO SUPPORT THE IMPLEMENTATION OF THE WGS

Digitization of the Application Process

Creating a digital platform for the Whitby Green Standard to make the process application easier for developers.

Consultation with the Development Community



April 2023: Launch Digital Platform

Development of an Incentives Program

Incentives will be used to encourage the uptake of the Whitby Green Standard.

Examples of incentives include:

- Third party incentives (\$)
- Recognition program, Sustainable Design Awards/Green Development Champion
- Stormwater Credit (\$)
- Servicing Allocation
- External Grant Programs



Incentives would be considered for developers who achieve **Tier 2** or higher.

Whitby Green Standard Demonstration Project

Phase 1: Design

Work with a real development application (approved plan), and model the requirements for 6-8 low-rise residential homes to meet the Whitby Green Standard voluntary tiers (Tier 2, Tier 3 and Tier 4).

Phase 2: Build

Construct at least three low-rise residential homes that meet the Whitby Green Standard voluntary tiers; measure actual costs and payback for each of the tiers;

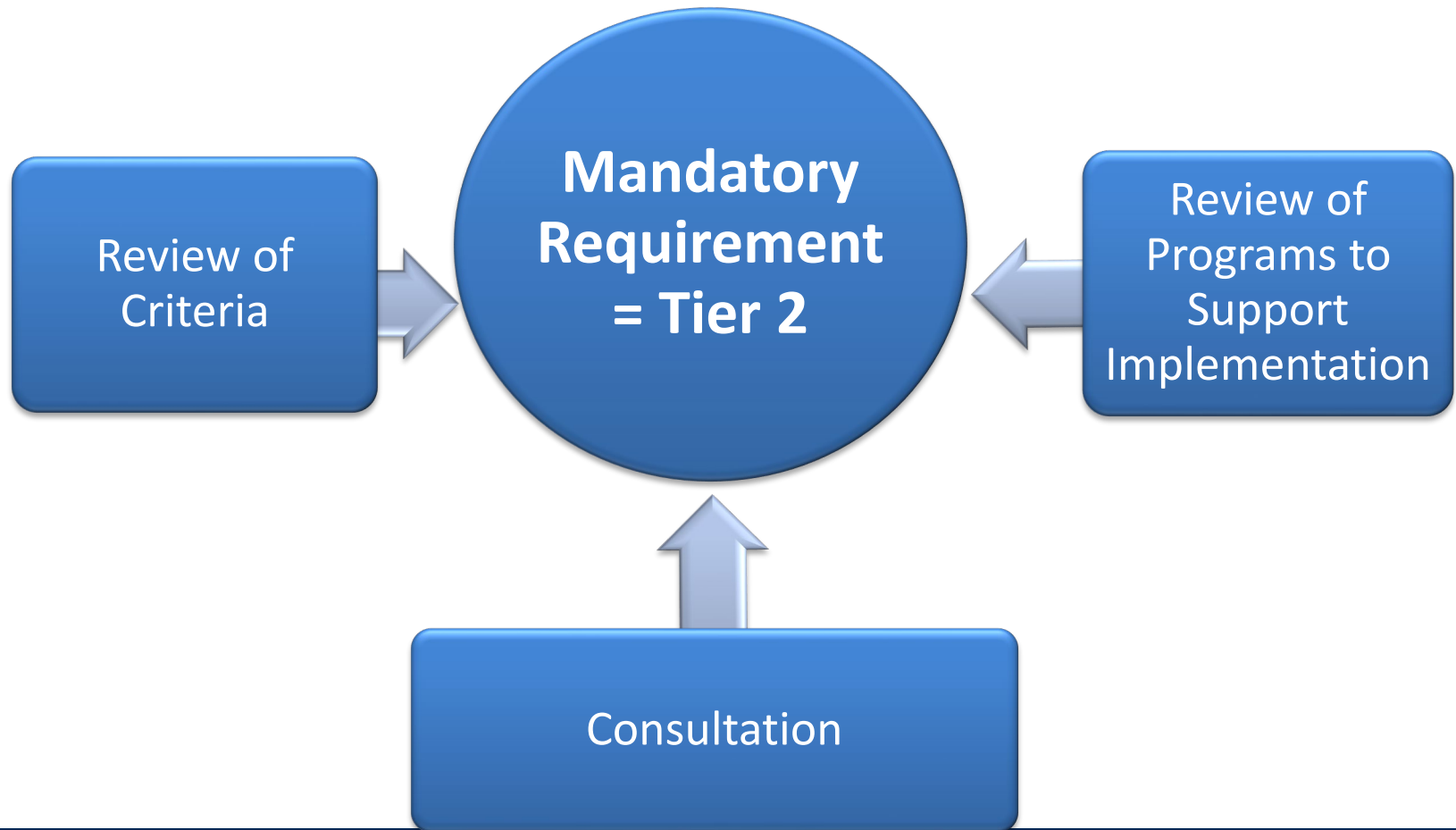
Phase 3: Monitor

Calculate the actual real costs, GHG emission reductions and other relevant metrics associated with each of the three buildings for 12 months of homeowner occupancy.

Phase 4: Report

Share outcomes with surrounding GTHA municipalities through the Clean Air Council Network which will also help advance increased uptake of Green Development Standards.

2024 Update of the Standard



Resources

TOWARDS LOW CARBON COMMUNITIES:

Creating Municipal Green Development Standards

AN IMPLEMENTATION TOOLKIT FOR MUNICIPAL STAFF

ACKNOWLEDGMENTS:

This report represents the culmination of efforts invested by many parties who offered their policy and technical expertise to the research compiled in this report. We are grateful for the support of:

Jade Schofield

Project Manager — Sustainability and Climate Change, Town of Whitby

Ashley Faulkner

Planner — Policy Planning, City of Vaughan

Tony Iacobelli

Manager — Environmental Sustainability, City of Vaughan

Amy Burke

Senior Planner — Special Projects, Municipality of Clarington

Margherita Cosentino

Community Planner — Policy, Town of Caledon

Alex Chapman

Manager — Climate Change Office, City of Guelph

Michael Dean

Senior Climate Change & Energy Planner — Climate Change & Asset Management, Town of Halton Hills

Rebecca Hagen

Project Manager — Environmental Programs, City of Ottawa

Andrea Flowers

Senior Project Manager — Planning, Infrastructure and Economic Development Department, City of Ottawa

Lisa King

Senior Policy Planner — City Planning Division, City of Toronto



For more information, contact:

Clean Air Partnership
75 Elizabeth Street,
Toronto, Ontario,
Canada, M5G 1P4
416.460.6320
cleanairpartnership.org
lbehari@cleanairpartnership.org

Layout Design by Carly Popenko

Clean Air Partnership alongside 8 municipalities (including Whitby) developed a Canada-wide tool for developing & implementing Green Development Standards.

Provides a simple walk through guide to the benefits and the guiding principles for implementing GDS

<https://fcm.ca/en/resources/mcip/case-study-green-development-standards-growing-communities>



Thank You

Sarah Shields, MREM
Project Manager – Sustainability
& Climate Change
shields@whitby.ca
905.444.3167