

King Township's Green Development Standards Adventure

February 8, 2024

1:00 pm – 2:00 pm

Aloma Dreher

Agenda

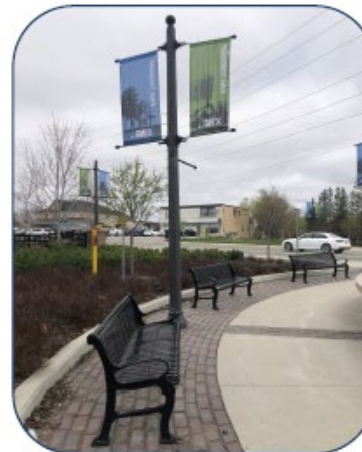


- 💡 Welcome
- 💡 Purpose
- 💡 All About King
- 💡 Policy Framework
- 💡 Background
- 💡 Program Overview
- 💡 Challenges
- 💡 Draft: ThinKING Green
- 💡 Next Steps
- 💡 Summary
- 💡 Questions/Comments



Purpose

- Provide a summary of King's context and structure.
- Summarize the applicable policy framework.
- Explain King Township's Green Development Standards Program.
- Outline the evolution of the Township's Green Development Standards Program.
 - Opportunities
 - Challenges
 - Consultation
- Introduce the new draft of ThinKING Green.



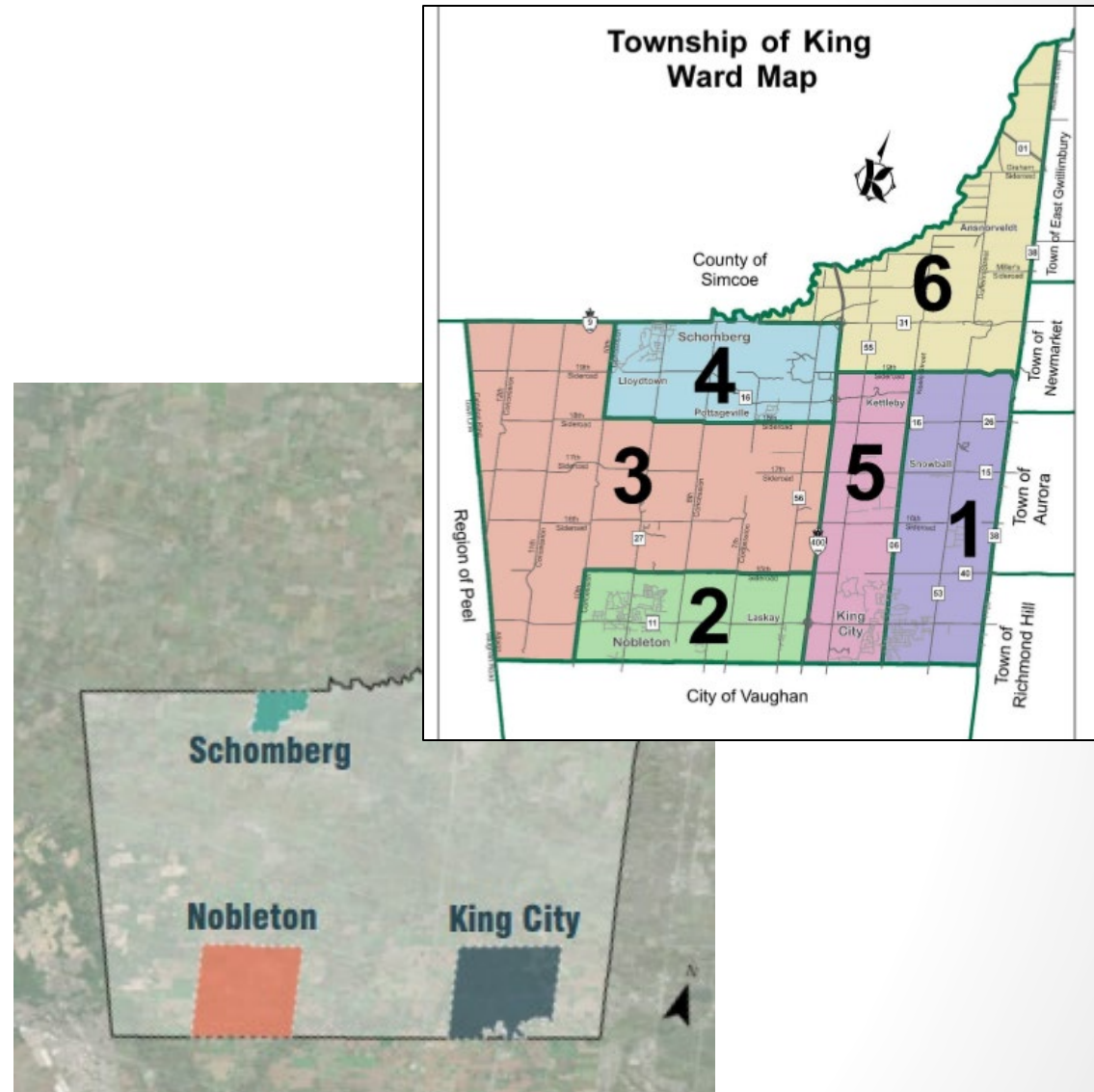
King's Context



- Lower-tier municipality in York Region
- Population: approximately 29,000
- Centrally located in the GTA
- Predominantly rural
- Includes portions of the Greenbelt Plan Area, Oak Ridges Moraine and Holland Marsh Specialty Crop Area

King's Structure

- Comprised of 6 wards
- Three Villages: King City, Nobleton and Schomberg
- Seven Hamlets: Ansnorveldt, Graham Sideroad, Kettleby, Laskay, Lloydtown, Pottageville, Snowball
- Population and employment growth concentrated within the three Villages



King's Climate Change Initiatives



- Climate Emergency declared in 2019.
- Council set targets, based on federal targets of:
 - 45% emission reduction by 2030; and
 - Net Zero by 2050
- Electric Vehicle Charging Network established in 2022.
- Community Climate Action Plan to be presented to Council in Spring 2024.

King's Policy Framework



Framework for Green Development Standards

Authority

Planning Act & Municipal Act

Content Areas

Planning Act & Provincial Plans

Alignment & Integration

Regional OP & Our King Official Plan

Implementation

Municipal Green Development Standards Program

Planning Act

- Municipalities must have regard to matters of Provincial Interest.
- Section 2 of the Planning Act sets out these interests, including:
 - The conservation of natural resources.
 - The supply, efficient use and conservation of energy and water.
 - The minimization of waste.
 - The orderly development of safe and healthy communities.
 - The promotion of development that is sustainable, to support public transit, and to be oriented to pedestrians.
- Section 41 provides powers for Site Plan Control.
- Requires municipal land use decisions to be consistent with the PPS.

Municipal Act

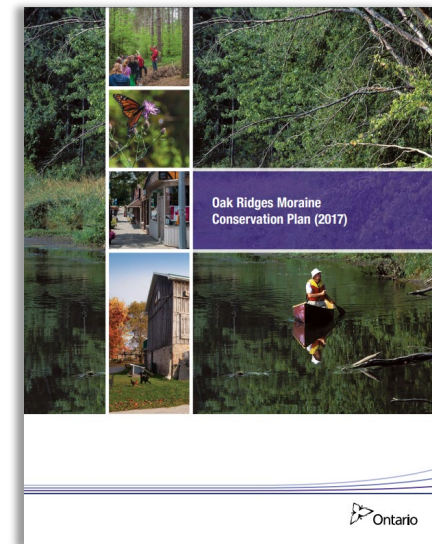
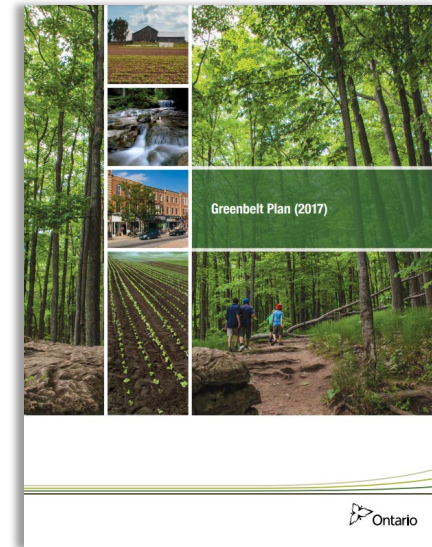
- The Municipal Act outlines the scope of municipal powers.
- Allows municipalities to pass a By-law respecting the economic, social and environmental well-being of a municipality.
- Section 97.1 addresses standards for the construction of buildings, whereby a municipality may pass a By-law respecting the protection or conservation of the environment.
- Municipalities are also able to require the construction of green roofs or alternative roof surfaces that achieve similar levels of performance.
- Municipalities may provide for or participate in long-term planning for energy use in the municipality.

Provincial Policy Statement

- Provides policy direction on matters of provincial interest related to land use planning and development.
- The PPS identifies that planning authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and preparing for the impacts of a changing climate through land use and development patterns.
- The PPS also provides policy direction for sustainable resource management, active transportation, conservation of biodiversity and water, and to protect essential ecological processes.
- Recognizes the protection of health, safety and preparing for the impacts of a changing climate by directing development away from areas of natural and human-made hazards.

Provincial Plans

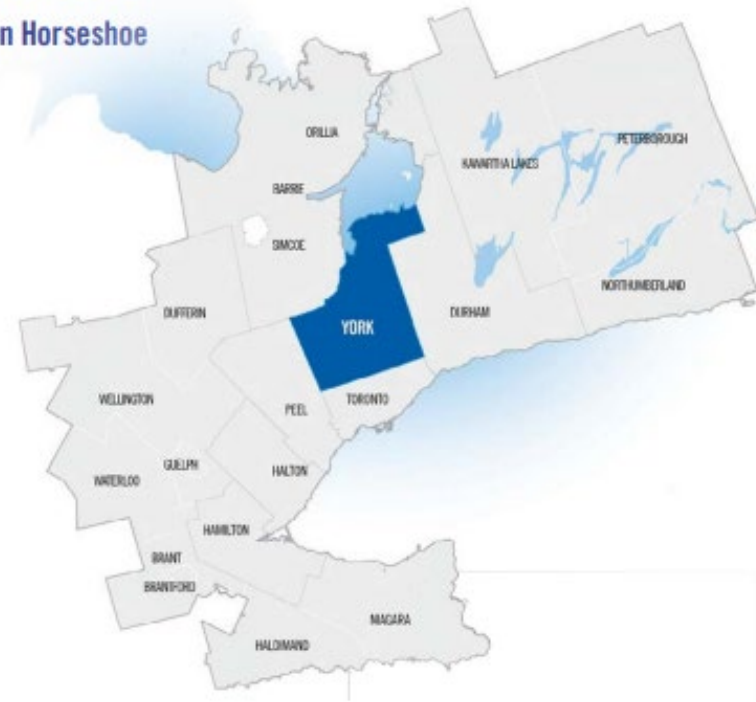
- Approximately 98% of the Township is subject to either the Greenbelt Plan or Oak Ridges Moraine Conservation Plan.
- The policies of these Plans have been incorporated into the metrics.
- Our Green Development Standards include metrics specific to the requirements of these Plans related to:
 - Lot Disturbance/Site Alteration
 - Landform Conservation Areas
 - Land Uses
- Metrics have been developed to be applicable in both a rural and urban context.



York Region Official Plan

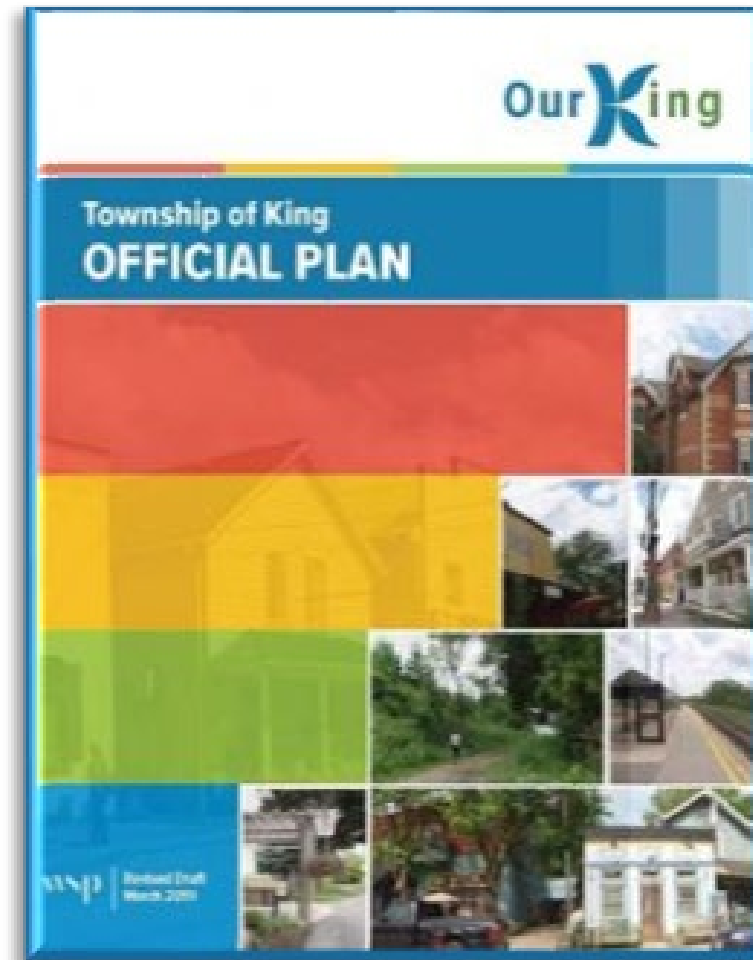
- The York Region Official Plan (YROP) encourages the development of municipal green development standards.
- The YROP recognizes that green development standards help promote complete communities through their commitment to sustainability and climate change resiliency.

Map of the Greater Golden Horseshoe



Township Official Plan


- Provides policies for the development and implementation of green development standards.
- Builds upon the sustainable building and development policies of the YROP.
- Identifies development standards and performance metrics to be included in the green standards.
- Details policies for sustainable construction practices.



Background

- Integrated Community Sustainability Plan, approved 2012.
- Sustainable King Development Standards Checklist introduced in 2013.
- Checklist required as part of a Complete Application.
- The Township's Sustainable Advisory Committee identified the need for the Township to develop a comprehensive sustainable development program.



 **Sustainable King Development Standards Checklist**

King Township's Sustainability Plan (adopted in 2012) recognizes Land-Use Planning as a major theme and identifies green building design, development and construction as a major component in achieving a more sustainable future for the Township. The Sustainable King Development Standards Checklist contains a list of sustainable design elements and features that can be integrated into the planning process. While all development must comply with the Ontario Building Code, the Township encourages the use of higher performance standards that exceed minimum standard requirements. The Sustainable King Development Standards Checklist is comprised of potential features that we encourage you to consider incorporating into your proposed development. Staff will use the Checklist to report the sustainable features of your development to the Township's Council and Sustainability Committee. The completion of the Sustainable King Development Standards Checklist is required as a component of a complete application submission.

(Note: The Township recognizes that specific features may not be applicable to all development applications).

FEATURE	CHECK
A. Applicable to All Development	
1. A minimum of 50% of wood-based materials and products to be used are certified in accordance with the <i>Forest Stewardship Council's</i> principles and criteria	
2. Materials with low emitting <i>Volatile Organic Chemicals (VOCs)</i> will be selected for interior finishings (i.e. paints, sealants, flooring, furniture, etc.)	
3. <i>Dark sky</i> compliant practices are proposed for all exterior lighting	
4. 100% of lighting fixtures are proposed to be <i>Energy Star</i> compliant	
5. At least 75% of non-hazardous construction and demolition debris is proposed to be recycled	
6. A waste management program will be implemented that focuses on waste diversions strategies that reduce the amount of waste during occupancy (operations & maintenance)	
7. A system that recovers and uses non-sewage or grey water is proposed for flushing and irrigation purposes	
8. A Stormwater Management Plan based on Integrated Stormwater Management Planning (ISMP) will be submitted and implemented. The ISMP is to be based	

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How did we get here?

- Identified as a priority of Council and the Township's Sustainability Advisory Committee in 2018.
- Program developed in house.
- First draft released Fall 2019.
- Final draft presented to Council in November 2020.
- Program came into effect February 2021.



The Purpose of Sustainable King



- Developed to expand upon the sustainability policies of the Township's Official Plan and Integrated Community Sustainability Plan.
- Established a set of metrics with corresponding targets to evaluate the sustainable performance of new development.
- Applied to all Site Plan applications.

Determining the Metrics

- Directed by Official Plan policy.
- Metrics divided into four principles:
 - Green Infrastructure
 - Natural Environment
 - Efficiency & Conservation
 - Healthy Communities
- Responded to priorities of Council.
- Based on review of other municipalities and Clean Air Partnership initiatives.

3.3 Energy Management Strategy	
Intent of the Metric:	<i>To reduce greenhouse gas emissions while benefitting customers by reduced ongoing expenses associated with energy usage.</i>
Targets:	<p>Minimum Target: N/A</p> <p>Level 1: Develop an energy management strategy for the development and identify opportunities for conservation, energy sharing, alternative energy sources, etc.</p> <p>Level 2: Implement an energy management strategy and utilize opportunities for conservation, energy sharing, alternative energy sources, etc.</p>
Point Allocation:	A maximum of 3 points.
Where to Demonstrate Compliance:	<ul style="list-style-type: none"> • Energy Report prepared and signed by a <u>qualified individual</u>.
How to Comply:	<p>Submission of an Energy Report that outlines the energy strategy for the development. The report should highlight the following:</p> <ul style="list-style-type: none"> • Energy conservation measures that will be adopted and expected savings • Opportunities for alternative energy sources and/or energy sharing between buildings • Projected annual energy consumption for the site, separated into heating, cooling and electricity • Electricity demand for the site • Relative savings for each relevant technology type • Appliances have Energy Star ratings.
Resources:	<ul style="list-style-type: none"> • Township of King Energy Report Terms of Reference • MOECP Community Emissions Reduction Planning: A Guide for Municipalities • LSRCA Carbon Reduction Strategy
Department to Review:	Community Services Department

Program Structure

- Metrics identified as “General”, “Village” or “Countryside”.
- Introduced a series of Targets for each metric:
 - Minimum Target
 - Level 1
 - Level 2
- Points assigned based on the Target Level achieved.
- For each Principle, at least one “Level 1” and one “Level 2” target must be achieved.
- A minimum of 25 points overall must be achieved.



Program Structure – Evaluation Table

Green Infrastructure

Metric	Development Target			Proposed Target Level	Plan or Report Name	Reviewing Agency/Department	Comments	Target Level Achieved	Points Awarded
	Minimum Target	Level 1	Level 2	<i>(Completed by applicant)</i>	<i>(Completed by applicant)</i>	<i>(Completed by Township)</i>	<i>(Completed by Township)</i>	<i>(Completed by Township)</i>	<i>(Completed by Township)</i>
General									
1.1 Alternative Energy Systems	Development is designed to be solar ready and includes the following: roof location of suitable size, pitch and orientation; labeled conduits from mechanical room to roof; additional plumbing valves and fittings on hot water heater, outlet for planned solar take and wall space for controls; identified locations of future components on construction plans.	On-site installation for use of renewable or alternative energy systems such as: solar, wind, water, geothermal, etc. to produce a minimum of 30% of all energy consumption on site.	On-site installation for use of renewable or alternative energy systems such as: solar, wind, water, geothermal, etc. to produce a minimum of 50% of all energy consumption on site.			<ul style="list-style-type: none"> Community Services Department – Climate Change Coordinator 			
						<ul style="list-style-type: none"> Public Works Department 			
1.2 Green Building Certification	The project is proposed to be built to achieve LEED® scoring of Silver OR enrolled in a recognized third party standard.	The project is proposed to be built to achieve LEED® scoring of Gold and demonstrates achievement after project completion.	The project is proposed to be built to achieve LEED® scoring of Platinum and demonstrates achievement after project completion.			<ul style="list-style-type: none"> Planning Division Building Division 			

Consultation

- Developed through consultation with the public and interested and affected parties.
- Active engagement and participations with the development community.
- Input and feedback provided by Working Group with participation from internal departments and external agencies.
- Public engagement platform: SpeaKING.



Challenges

- Changes in Provincial policy and legislation.
- Introduction of new YROP and new Township Master Plans.
- Inconsistent scoring of points.
- Ensuring a timely review of applications and submission materials.
- Obtaining buy-in from applicants and development community.
- Sufficient training and understanding from Staff.



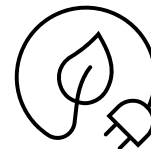
Opportunities

- Reduce GHG emissions.
- Increase resilience in new development.
- Provide flexibility for applicants to choose metrics and targets that are appropriate for their development.
- Work with interested and affected parties to understand concerns and improve understanding.
- Promote active transportation, improve health and wellness.
- Support the creation of diverse and complete communities.



Program Expansion: ThinKING Green

- Initial draft released June 2023.
- Updated draft published January 2024.
- Proposed to be expanded to apply to both applications for Draft Plan of Subdivision and Site Plan.
- Introduces a new structure and format for review.



ThinKING Green – Program Structure

- New principles:
 - Green Infrastructure
 - Energy and Conservation
 - Built Environment
 - Natural Environment
 - Healthy Communities
- New and revised metrics to respond to policy changes and new priorities.
- New scoring system and implementation procedure.
- Alignment with the Township's Corporate Strategic Plan.



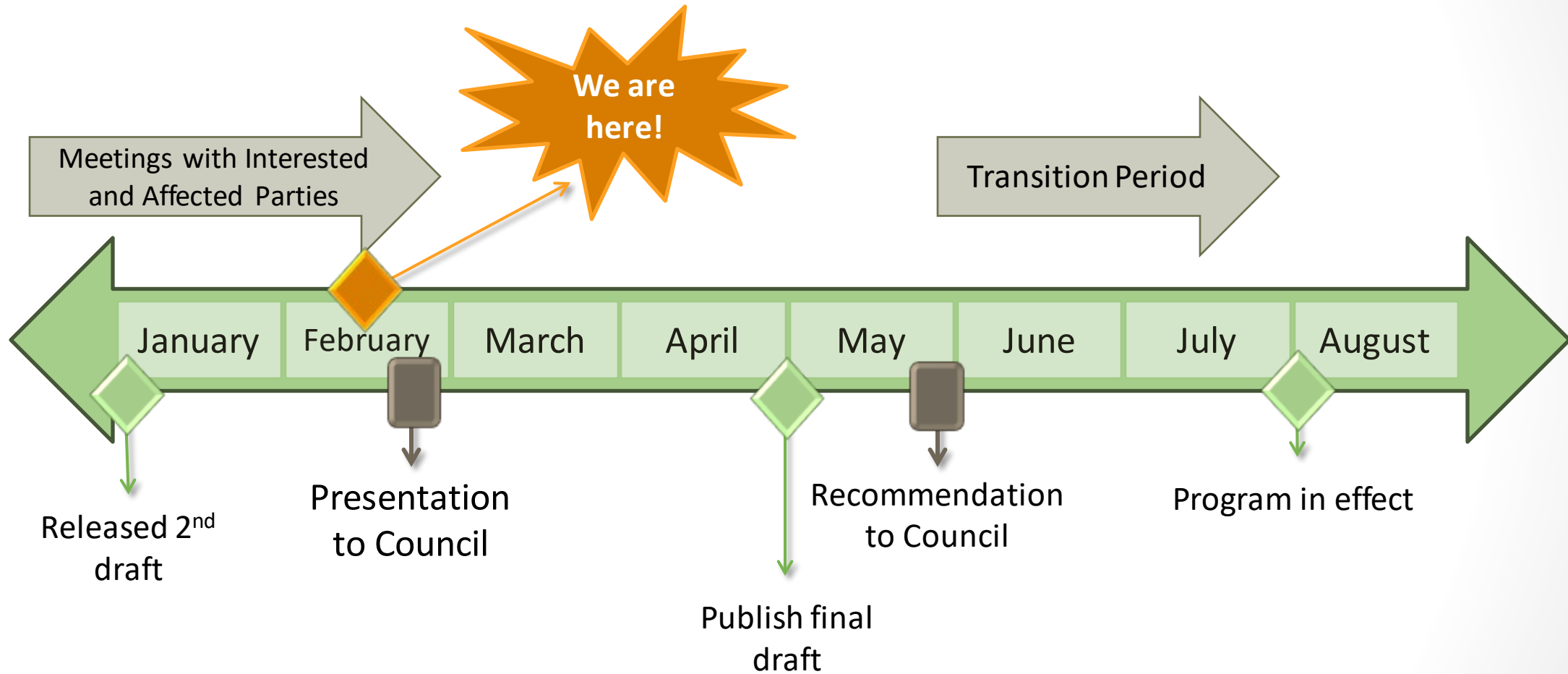
ThinKING Green – Program Structure

2.1 Alternative Energy Systems				
Intent		To promote buildings that utilize alternative energy systems that reduce energy use and <u>greenhouse gas emissions</u> .		
Applicable to		<input type="checkbox"/> Draft Plan of Subdivision		<input checked="" type="checkbox"/> Site Plan
		<input checked="" type="checkbox"/> Residential	<input checked="" type="checkbox"/> Mixed-Use	<input checked="" type="checkbox"/> Industrial, Commercial, Institutional
Targets	Level	Points	Requirement	Documentation
	Minimum	1 point	Development is designed to be solar ready and includes the following: roof location of suitable size, pitch, and orientation; labeled conduits from mechanical room to roof; additional plumbing valves and fittings on hot water heater, outlet for planned solar take and wall space for controls; identified locations of future components on construction plans.	
	Level 1	+ 2 points <i>(total 3 points)</i>	On-site installation for use of <u>renewable or alternative energy systems</u> such as: solar, wind, water, geothermal, etc. to produce a minimum of 30% of all energy consumption on-site.	
	Level 2	+ 3 points <i>(total 6 points)</i>	On-site installation for use of <u>renewable or alternative energy systems</u> such as: solar, wind, water, geothermal, etc. to produce a minimum of 50% of all energy consumption on-site.	
Resources		<ul style="list-style-type: none"> Natural Resources Canada, Renewable Energy Ontario Energy Board Passive House Standards 		
Department to Review		Community Services Department – Environmental Outreach & Sustainability Growth Management Services – Building		
		Where to Demonstrate Compliance? <ul style="list-style-type: none"> • Authorization Letter/Energy Report signed by a <u>qualified individual</u>. • Architectural Plans (<i>where applicable</i>) • Site Plan (<i>where applicable</i>) • Applicable Engineering Documents How to Comply? <ul style="list-style-type: none"> • The Authorization letter should quantify the percentage of energy consumption from alternative energy systems based on the modeled or estimated performance of the proposed development including all fixtures, appliances, ventilating and heating equipment. • Elevation Plans, Floor Plans and Site Plan should depict the modifications to enable the development to utilize alternative energy systems. • All submission materials are to be prepared by a <u>qualified individual</u>. 		

ThinKING Green – Program Structure

Metric	Proposed Sustainability Target	Submitted Plans/Reports	Reviewing Department	Comments	Points Awarded
			<i>(Completed by Township)</i>		
3.1 Bird Friendly Design	<input type="checkbox"/> Minimum <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> N/A	<input type="checkbox"/> Architectural Plans <input type="checkbox"/> Letter of Intent			
3.2 Building Orientation	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> N/A	<input type="checkbox"/> Site Plan <input type="checkbox"/> Architectural Plans			
3.3 Cultural Heritage Preservation	<input type="checkbox"/> Minimum <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> N/A	<input type="checkbox"/> Site Plan/Draft Plan <input type="checkbox"/> Heritage Impact Assessment & Interpretation Plans <input type="checkbox"/> Architectural Plans <input type="checkbox"/> Landscape Plans			
3.4 Off-Street Parking	<input type="checkbox"/> Minimum <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> N/A	<input type="checkbox"/> Site Plan <input type="checkbox"/> Parking Plan <input type="checkbox"/> Traffic Impact Study			
3.5 Parking - Electric Vehicle Charging <input type="checkbox"/> A) Non-Residential <input type="checkbox"/> B) Residential	<input type="checkbox"/> Minimum <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> N/A	<input type="checkbox"/> Site Plan/Draft Plan <input type="checkbox"/> Site Statistics Table <input type="checkbox"/> Architectural Plans <input type="checkbox"/> Letter of Intent <input type="checkbox"/> Traffic Impact Study			
3.6 Parking – Carpool	<input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> N/A	<input type="checkbox"/> Site Plan <input type="checkbox"/> Site Statistics Table <input type="checkbox"/> Transportation or Traffic Impact Study			
3.7 Shadow Impacts	<input type="checkbox"/> Minimum <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> N/A	<input type="checkbox"/> Architectural Plans <input type="checkbox"/> Shadow Study Assessment/Impact Statement <input type="checkbox"/> Shadow Study Models			
3.8 Active Transportation Network	<input type="checkbox"/> Minimum <input type="checkbox"/> Level 2 <input type="checkbox"/> N/A	<input type="checkbox"/> Transportation Study or Traffic Calming Report <input type="checkbox"/> Draft Plan <input type="checkbox"/> Letter of Intent			

ThinKING Green – Next Steps



Summary

- Complex and frequently changing policy framework.
- Importance of flexibility and broad applicability.
- Opportunity to develop metrics specific to your community.
- Undertake extensive engagement to promote understanding and community involvement.
- Regular updates are beneficial to respond to changes and to strengthen standards.



Thank you

Visit: <https://speaking.king.ca/thinking-green>

Contact: adreher@king.ca

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