

Environmental Action Committee

Date: October 3, 2023
Time: 9:30 AM
Location: Council Chambers, Civic Centre, 2nd Floor
300 City Centre Drive, Mississauga, Ontario, L5B 3C1
and Online Video Conference

Members

Councillor Matt Mahoney	Ward 8 (Chair)
Councillor Stephen Dasko	Ward 1 (Vice-chair)
Councillor Brad Butt	Ward 11
Councillor Alvin Tedjo	Ward 2
Prabhjit Banga	Citizen Member
Jihan Khatib	Citizen Member
Morgan Lee	Citizen Member
Karen Pawlowski	Citizen Member
Derek Stone	Citizen Member
Alice Casselman	Association for Canadian Educational Resources
Britt McKee	Ecosource
Melanie Kramer	Credit Valley Conservation
Jennifer Taves	Partners in Project Green

To Request to Speak on Agenda Items - Advance registration is required to make a Deputation please email Michelle Sanstra, Legislative Coordinator at michelle.sanstra@mississauga.ca or call 905-615-3200 ext. 5411 no later than **Friday September 29, 2023 before noon.**

Questions for Public Question Period - Questions for Public Question Period should be provided to the Legislative Coordinator at least 24 hours in advance of the meeting.

Comments submitted will be considered as public information and entered into the public record.

Please note the Environmental Action Committee will be streamed and a video will be posted afterwards.

Contact

Michelle Sanstra, Legislative Coordinator, Legislative Services
905-615-3200 ext. 5411

Email: michelle.sanstra@mississauga.ca

Find it Online

<http://www.mississauga.ca/portal/cityhall/councilcommittees>

An asterisk (*) symbol indicates an Item that has been either Revised or Added

1. **CALL TO ORDER**

2. **INDIGENOUS LAND STATEMENT**

We acknowledge the lands which constitute the present-day City of Mississauga as being part of the Treaty and Traditional Territory of the Mississaugas of the Credit First Nation, The Haudenosaunee Confederacy the Huron-Wendat and Wyandotte Nations. We recognize these peoples and their ancestors as peoples who inhabited these lands since time immemorial. The City of Mississauga is home to many global Indigenous Peoples.

As a municipality, the City of Mississauga is actively working towards reconciliation by confronting our past and our present, providing space for Indigenous peoples within their territory, to recognize and uphold their Treaty Rights and to support Indigenous Peoples. We formally recognize the Anishinaabe origins of our name and continue to make Mississauga a safe space for all Indigenous peoples.”

3. **APPROVAL OF AGENDA**

4. **DECLARATION OF CONFLICT OF INTEREST**

5. **MINUTES OF PREVIOUS MEETING**

5.1 Environmental Action Committee DRAFT Minutes – September 5, 2023

6. **PRESENTATIONS - Nil**

7. **DEPUTATIONS**

Any member of the public interested in making a deputation to an item listed on the agenda must register by calling 905-615-3200 ext. 5411 or by emailing michelle.sanstra@mississauga.ca by **Friday September 29, 2023 before noon**.

Each Deputation to Committee is limited to speaking not more than 10 minutes.

Pursuant to Section 57.1 of the Council Procedure By-law 0044-2022, as amended:

Deputations shall be received and the matter shall be referred to staff for a report, unless there is a resolution or recommendation passed to “receive” the Deputation. After a Deputation is completed, Members shall each have one opportunity to make a preamble statement and ask questions to the Deputant(s) or staff for clarification purposes only, and without debate.

7.1 Edward Nicolucci, Urban Designer, regarding the Mississauga Green Development Standards (GDS) Update

7.2 Gaby Kalapos, Executive Director, Clean Air Partnership regarding Green Development Standards: Value Proposition and Driving the Net Zero Market

8. PUBLIC QUESTION PERIOD - 15 Minute Limit

Public Comments: Advance registration is required to participate and/or to make comments in the virtual public meeting. Any member of the public interested in speaking to an item listed on the agenda must register by calling 905-615-3200 ext. 5411 or by emailing michelle.sanstra@mississauga.ca **by Friday September 29, 2023 before noon.**

Pursuant to Section 58 of the Council Procedure By-law 0044-2022, as amended:

Environmental Action Committee may grant permission to a member of the public to ask a question of Environmental Action Committee, with the following provisions:

1. Questions may be submitted to the Clerk at least 24 hours prior to the meeting;
2. A person is limited to two (2) questions and must pertain specific item on the current agenda and the speaker will state which item the question is related to;
3. The total public question period time is 15 minutes maximum and shall not be extended by the Chair; and
4. Any response not provided at the meeting will be provided in the format of written response.

9. CONSENT AGENDA

10. MATTERS TO BE CONSIDERED

10.1 Environmental Action Committee (EAC) Work Plan

11. INFORMATION ITEMS

12. OTHER BUSINESS/ENQUIRIES

13. DATE OF NEXT MEETING

Tuesday, November 7, 2023 at 9:30 AM

Council Chambers and Online Video Conference

14. ADJOURNMENT

Environmental Action Committee

Date: September 5, 2023
Time: 9:32 AM
Location: Council Chambers, Civic Centre, 2nd Floor
300 City Centre Drive, Mississauga, Ontario, L5B 3C1
and Online Video Conference

Members Present	Councillor Matt Mahoney	Ward 8 (Chair)
	Councillor Stephen Dasko	Ward 1 (Vice-chair)
	Councillor Alvin Tedjo	Ward 2
	Councillor Brad Butt	Ward 11
	Prabhjit Banga	Citizen Member
	Jihan Khatib	Citizen Member
	Morgan Lee	Citizen Member
	Karen Pawlowski	Citizen Member
	Derek Stone	Citizen Member
	Alice Casselman	Association for Canadian Educational Resources
	Britt McKee	Ecosource
	Jennifer Taves	Partners in Project Green
Members Absent	Melanie Kramer	Credit Valley Conservation

Staff/Agency Representatives

Dianne Zimmerman, Manager, Environment
Nadia Paladino, Director, Parks & Forestry & Environment
Michelle Sanstra, Legislative Coordinator

1. **CALL TO ORDER**

Councillor Mahoney, Chair called the meeting to order at 9:32 AM

2. **INDIGENOUS LAND STATEMENT**

Councillor Mahoney, Chair cited the Indigenous Land Statement.

3. **APPROVAL OF AGENDA**

That the September 4, 2023 Environmental Action Committee Agenda be approved.

Approved (Councillor Tedjo)

4. **DECLARATION OF CONFLICT OF INTEREST - Nil**

5. **MINUTES OF PREVIOUS MEETING**

5.1 Environmental Action Committee DRAFT Minutes – July 4, 2023

Approved (M. Lee)

6. **PRESENTATIONS - Nil**

7. **DEPUTATIONS**

7.1 Jonathan Brown, Green Infrastructure Planner/Research and Policy Director, STEM-The-Tide regarding Digital Twin Solution for Green Infrastructure

Jonathan Brown, Green Infrastructure Planner/Research and Policy Director, STEM-The-Tide spoke to the Digital Twin Solution for Green Infrastructure.

Alice Casselman, Community Group Representative for the Association for Canadian Educational Resources summarized the subject matter.

Action Item: Councillor Dasko requested for staff to benchmark Cobourg and other municipalities regarding the Pilot Digital Twin LID project and report back to the Committee.

RECOMMENDATION EAC-0019-2023

Moved By Britt McKee

That the deputation and associated presentation from Jonathan Brown, Green Infrastructure Planner/Research and Policy Director, STEM-The-Tide regarding Digital Twin Solution for Green Infrastructure, be received.

Received

7.2 Sadia Butt, MFC, PhD, Urban Forestry Professional and ISA Certified Arborist regarding Combating Malpractice in Tree Care in Mississauga -Revisiting Arboriculture Best Practices

Sadia Butt, MFC, PhD, Urban Forestry Professional and ISA Certified Arborist spoke to Combating Malpractice in Tree Care in Mississauga - Revisiting Arboriculture Best Practices.

Councillor Dasko enquired about Gator bags functionality and purpose, Ms. Butt responded to Councillor Dasko's enquiry.

Councillor Butt thanked Ms. Butt for her presentation and voiced concerns regarding tree health on City streets and parks.

Amory Ngan, Manager, Forestry spoke to the City's tree practices, processes and policies.

Action item: Councillor Dasko requested for staff to report back best practices regarding tree care.

RECOMMENDATION EAC-0020-2023

Moved By Councillor Dasko

That the deputation and associated presentation from Sadia Butt, MFC, PhD, Urban Forestry Professional and ISA Certified Arborist regarding Combating Malpractice in Tree Care in Mississauga - Revisiting Arboriculture Best Practices, be received.

Received

7.3 Dianne Zimmerman, Manager, Environment regarding a summary on the Environmental Action Committee Work Plan Session

Dianne Zimmerman, Manager, Environment spoke to the summary on the Environmental Action Committee Work Plan Session.

Councillor Mahoney thanked Ms. Zimmerman for facilitating the workshop.

Ms. Zimmerman noted that she will speak to the Action items list at a future meeting.

RECOMMENDATION EAC-0021-2023

Moved By Derek Stone

That the deputation and associated presentation from Dianne Zimmerman, Manager, Environment regarding a summary on the Environmental Action Committee Work Plan Session, be received.

Received

7.4 Vasya Jeyakanthan, Waste Management Assistant regarding Circular Economy Initiatives at the City of Mississauga

Vasya Jeyakanthan, Waste Management Assistant spoke to the Circular Economy Initiatives at the City of Mississauga.

Councillor Mahoney spoke to the initiative.

Councillor Tedjo inquired about the availability of the Lorne Park Library for the drive since Clarkson Library is closed for the fall.

Prabhjit Banga, Citizen Member enquired about Partners in Project Green Materials Exchange Program. Ms. Jeyakanthan responded to Ms. Banga's enquiry.

Jennifer Taves, Community Group Representative for Partners in Project Green spoke to the Material Exchange Program and future initiatives.

Derek Stone, Citizen Member enquired about the weight and the type of waste that was collected. Ms. Jeyakanthan responded to Mr. Stone's enquiry.

RECOMMENDATION EAC-0022-2023

Moved By Jihan Khatib

That the deputation and associated presentation from Vasya Jeyakanthan, Waste Management Assistant regarding Circular Economy Initiatives at the City of Mississauga, be received.

Received

8. PUBLIC QUESTION PERIOD - 15 Minute Limit

No members of the public registered to speak.

9. CONSENT AGENDA

RECOMMENDATION EAC-0023-2023

Moved By Alice Casselman

That the following item(s) were approved on the consent agenda:

- 10.1 – Environmental Action Committee (EAC) Work Plan

10. MATTERS CONSIDERED

10.1 Environmental Action Committee (EAC) Work Plan

No discussion took place regarding this item.

11. INFORMATION ITEMS - Nil

12. OTHER BUSINESS/ENQUIRIES - Nil

13. DATE OF NEXT MEETING

Tuesday, October 3, 2023 at 9:30am

Council Chambers, Civic Centre

and Online Video Conference

14. ADJOURNMENT

10:39 AM (B. Mckee)

DRAFT

Mississauga Green Development Standards Update

Environmental Action Committee

October 3rd, 2023



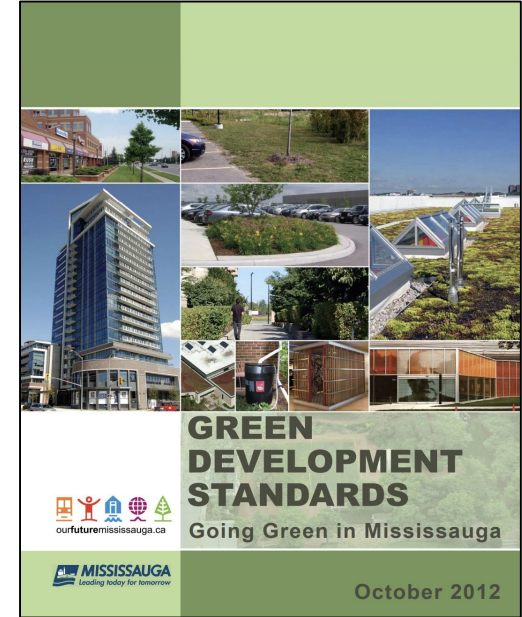
Land Acknowledgement

We acknowledge the lands which constitute the present-day City of Mississauga as being part of the Treaty and Traditional Territory of the Mississaugas of the Credit First Nation, The Haudenosaunee Confederacy, the Huron-Wendat and Wyandot Nations. We recognize these peoples and their ancestors as peoples who inhabited these lands since time immemorial. The City of Mississauga is home to many global Indigenous Peoples.

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Current GDS 2012

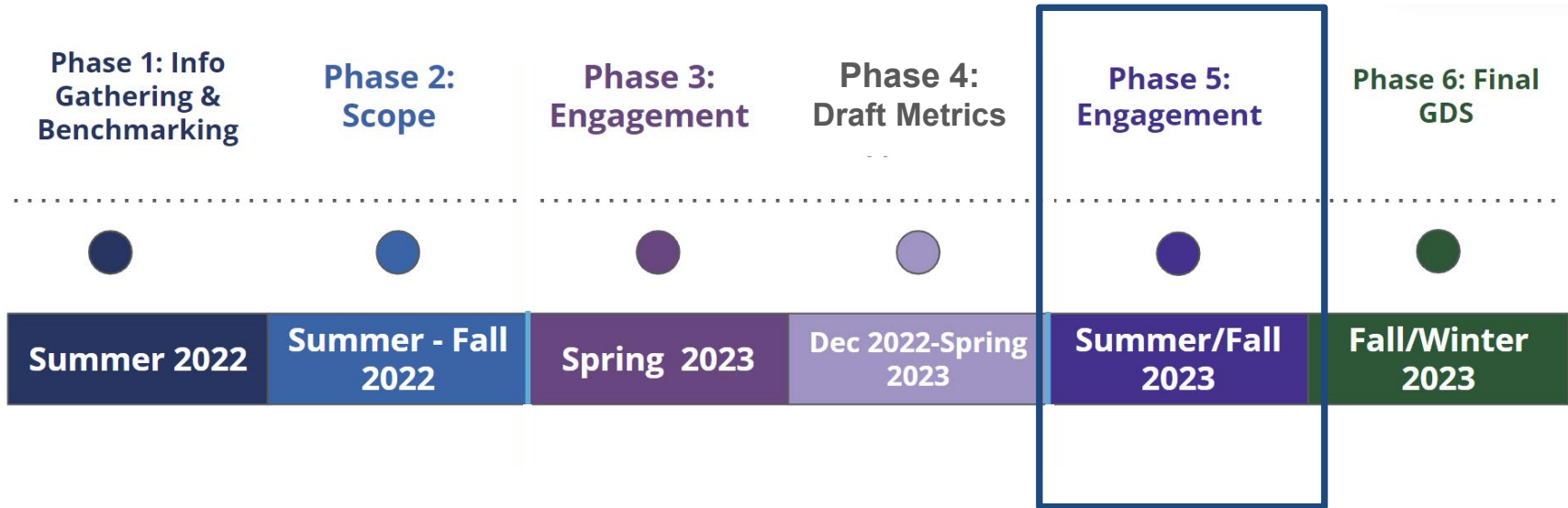
- New private developments under the Planning Act
- Although successful, it does not address GHG emissions and building resilience
- Climate Change Action Plan, Action 3.1 – states - update the GDS with energy and resilient building design



GDS 2012

Project Timelines

Update since the April 5th EAC meeting



What We Heard

Region, CA's and TAF

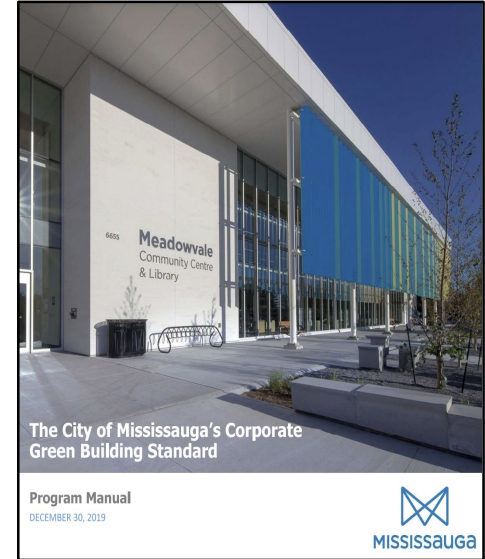
- **Alignment with other municipality GDS's a positive**
- **Tiered approach gives developers time to anticipate future metrics**
- Expand stormwater metrics
- Consider co-benefits with health outcomes
- Peer to peer meetings/information is critical for success
- Ensure flexibility while meeting main objectives



**Climate Change
Action Plan**

What We Heard - ICI Developers

- Tailor metrics to industrial building
- Building envelope (energy) metrics are expensive
- Toronto's GDS is clear and provides roadmap ahead
- Landscaping/stormwater metrics minimal opportunities
- Provide alternatives for difficult metrics
- The renewal energy metric, i.e., solar panels, is a complex target with roof space and maintenance issues



**Mississauga Corporate
Green Building**

What We Heard - Residential Developers

- Podium roof space given the metrics will be challenging
- Ensure a simple application process with easy documentation
- Flexibility in metrics/trade-offs/alternative options
- The GDS adds cost and this may impact project margins
- The TGS has shifted the industry to be more environmental
- The building industry needs more time to get to net-zero building
- Thicker insulated exterior walls equals less interior space
- Reduce parking rates to reduce environmental impact

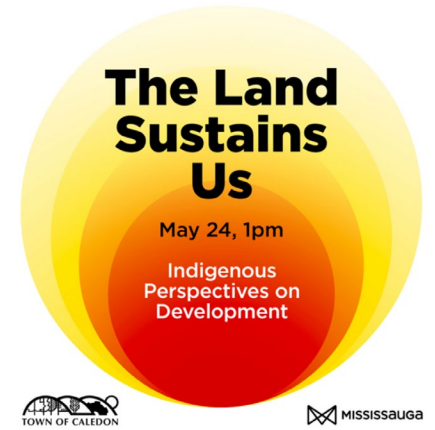


Northshore Residences

What We Heard - Indigenous Speakers

The Land Sustains Us | Indigenous Perspectives on Development (May 24)

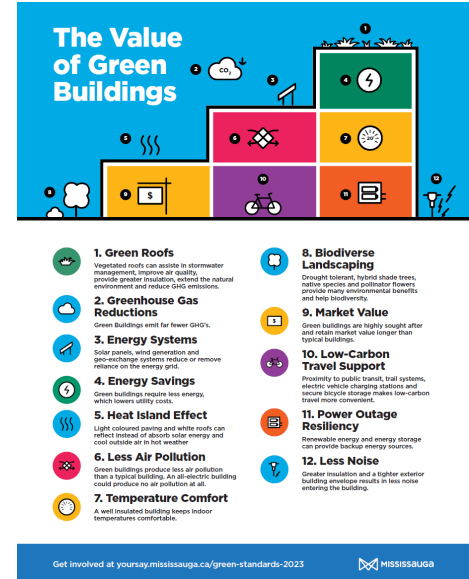
- **We must consider all plant and animal species, not just humans**
- **Our responsibility as their relations is to speak up for their interests before ours, because we're all connected.** The environmental movement is a personal and professional commitment
- We must not stop, but rather continue to listen and learn
- We do this work for future generations
- To incorporate Indigenous perspectives, need time to reflect and work on Indigenous timelines which conflicts with working within a legislative framework
- Indigenous professionals are tired, but tirelessly committed. Non-indigenous need to do the work and to get educated on the Indigenous perspective.



What We Heard

Youth – MYAC and Future Majority

- Youth perspective should be heard as they will inherit the planet
- Encouraging transit, cycling and other modes of low-carbon travel should be considered
- Extreme weather events are seen as normal
- Learning about climate change is important
- Encourage them to think beyond their day-to-day activities



MGDS Poster

GDS Phase 5 Engagement: 'YourSay' Mississauga

Resident and Industry Survey:

GDS Survey for the Community

Please complete this survey if you have ties to Mississauga, live in the City, work in Mississauga, visit the area, or go to school here.

Take the survey

GDS Survey for Industry

Please complete this survey if you are a member of the development or construction industry, a consultant working for the industry, or an interested party (utility, non-profit organization, renewable energy provider, etc.).

Take the survey

120 respondents (Sept. 25, 2023)


- 8 Industry
- 112 residents

Ranked climate impacts that are most important to the community:

1. Reduced building embodied carbon (e.g. building materials that contribute less GHG emissions in their production, lower impact materials, and/or recycled materials)
2. Reduced construction waste
3. Improved waste sorting infrastructure
4. Provide on site electric vehicle charging infrastructure
5. Provide on site secure long-term bicycle storage
6. Provide onsite secure short-term bicycle storage

GDS Phase 5 Engagement: 'YourSay' Mississauga

- Mandatory Tier 1 Drafts Metrics (2024 - 2027)
- Tier 2 Voluntary with Incentives (2027 - 2029)
- Tier 3 Voluntary with Incentives (2030) Near Net-Zero

DRAFT - CITY OF MISSISSAUGA UPDATED GREEN DEVELOPMENT STANDARDS					
RESIDENTIAL BUILDINGS (LOW RISE ≤ 4 STOREYS w/ Minimum 10 Units)					
	TIER 1 MANDATORY REQUIREMENTS (2024-2027)	TIER 2 VOLUNTARY REQUIREMENTS (2027-2029)	TIER 3 VOLUNTARY REQUIREMENTS (2030)	SUBMISSION REQUIREMENTS	
THEME 1: ENERGY AND BUILDING PERFORMANCE					
EB1: Energy Performance	Design, construct and label the building(s) to achieve at least ENERGY STAR® for New Homes, version 17.1 or R-2000 requirements	Design and construct the building in accordance with the CHBA Net Zero-Ready Home Labelling Program	Design and construct the building in accordance with the CHBA Net Zero Home Labelling Program or Passive House Standards.	Energy Star Certification Report A Terms of Reference will be available.	
THEME 2: CLIMATE IMPACTS					
CH1: Embodied Carbon	Conduct a Materials Emissions Assessment to measure A1-A3, stage emissions for all structural, enclosure and major finishes.	Conduct a Materials Emissions Assessment to measure A1-A3, stage emissions for all structural, enclosure and major finishes. The report must demonstrate an emissions	Conduct a Materials Emissions Assessment to measure A1-A3, stage emissions for all structural, enclosure and major finishes. The report must demonstrate an emissions	Using BEAM (Building Emissions Accounting Materials tool or an equivalent tool conduct a Life Cycle Assessment (LCA) and report carbon footprint as the LCA impact measure 'global warming potential' (GWP) in kilograms of carbon dioxide equivalent (CO2e).	

GDS Phase 5 Engagement: 'YourSay' Mississauga

Draft Metrics – four building categorizes:

- Residential Buildings (Medium to High), Residential Buildings (Low Rise), Institutional and Commercial Buildings, and Industrial Buildings.
- 12,805 views of the metrics (Sept. 25, 2023)

20 Comments on the metrics including:

- **50% of energy coming from renewables is again fairly large ask** as it really dependant on building type and location more than anything else. Need to offer exclusions for technical feasibility out of buildings control - like if building is shaded, solar PV/thermal may not make sense
- Tier 1 should state that buildings above certain size must **enroll into Energy Star** (just follow provincial regulation on this).
- **Reduce irrigation water consumption by 20%** using a combination of treatment measure for re-use of greywater and blackwater (e.g. rain barrels, cisterns, green roofs, filtration ponds) - The 20% reduction is already readily achievable on many developed and could be implemented in the 2024-2027 period.

Next Steps

- Resident and industry comments 'Your Say' website welcome until October 4th
- Re-engage with Residential/ICI developers, youth/Future Majority, Indigenous Nations, interested individuals
- Meet with Councillors/Leadership Team in October/November
- Final Metrics with report to PDC for approval in December 2023



Transparent Solar Panels

Thank You

Green Development Standards:

Value Proposition and Driving the Net
Zero Market

Mississauga

Environmental Action Committee (EAC)

Gaby Kalapos

gkalapos@cleanairpartnership.org

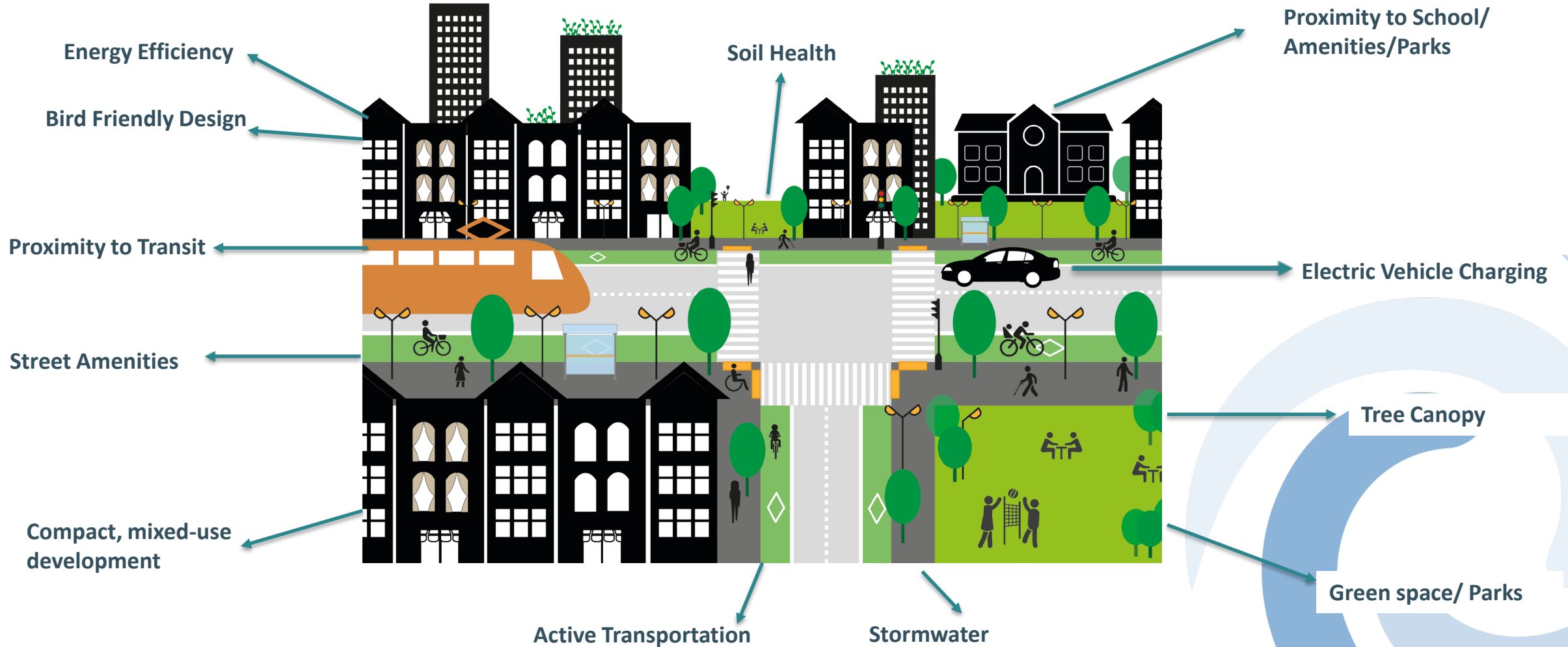


What are Green Development Standards (GDS)?

- Standards implemented by municipalities to encourage sustainable community design
- Guides development at a level of planning and design that focuses on the community as a whole
- Integrated into the planning approvals process for development applications
- Provides market ambition and innovation at a smaller scale



What do Green Development Standards cover?



Why Green Development Standards?

- Climate emergencies are being declared all over the world
- Ontario's population is projected to grow by 30.2 per cent (4.3 million) between 2017 to 2041.
- Addressing energy and infrastructure costs
- New buildings present an ideal opportunity
- To advance GHG targets, new buildings and neighborhoods need to be built to minimize GHG emissions through:
 - Energy efficient building principles (easier to build to net zero than retrofit)
 - Connected communities with active and public transportation
 - Addressing opportunities at constructions provides the greatest return on investment
 - Reducing the risk of fossil fuel stranded assets and the need for future costly retrofits

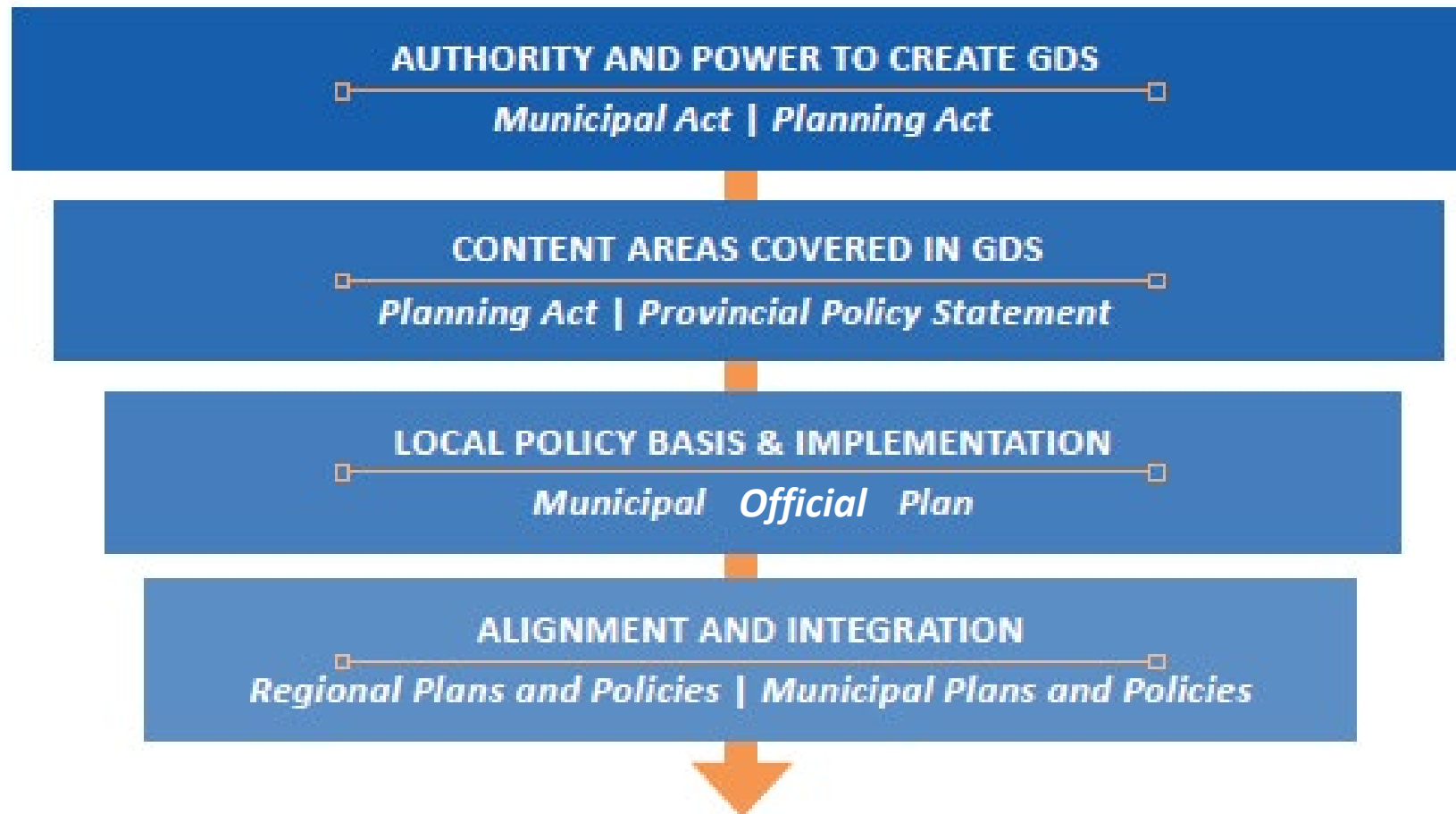


Value Proposition for GDS

- Integrating standards and requirements that already exist into one place
- Provides clarity and transparency to the development community on metrics that the municipality wants to increase
- Brings the sustainability discussion to the beginning of the development application process
- Provides the direction for where standards will be going over time
- Key tool for municipalities to implement the goals of their Official Plans and to stimulate local economic development
- Increasing growth offers a key opportunity to ensure that new developments consider public health, climate change, energy, and resource use



Legislative and Policy Context for GDS

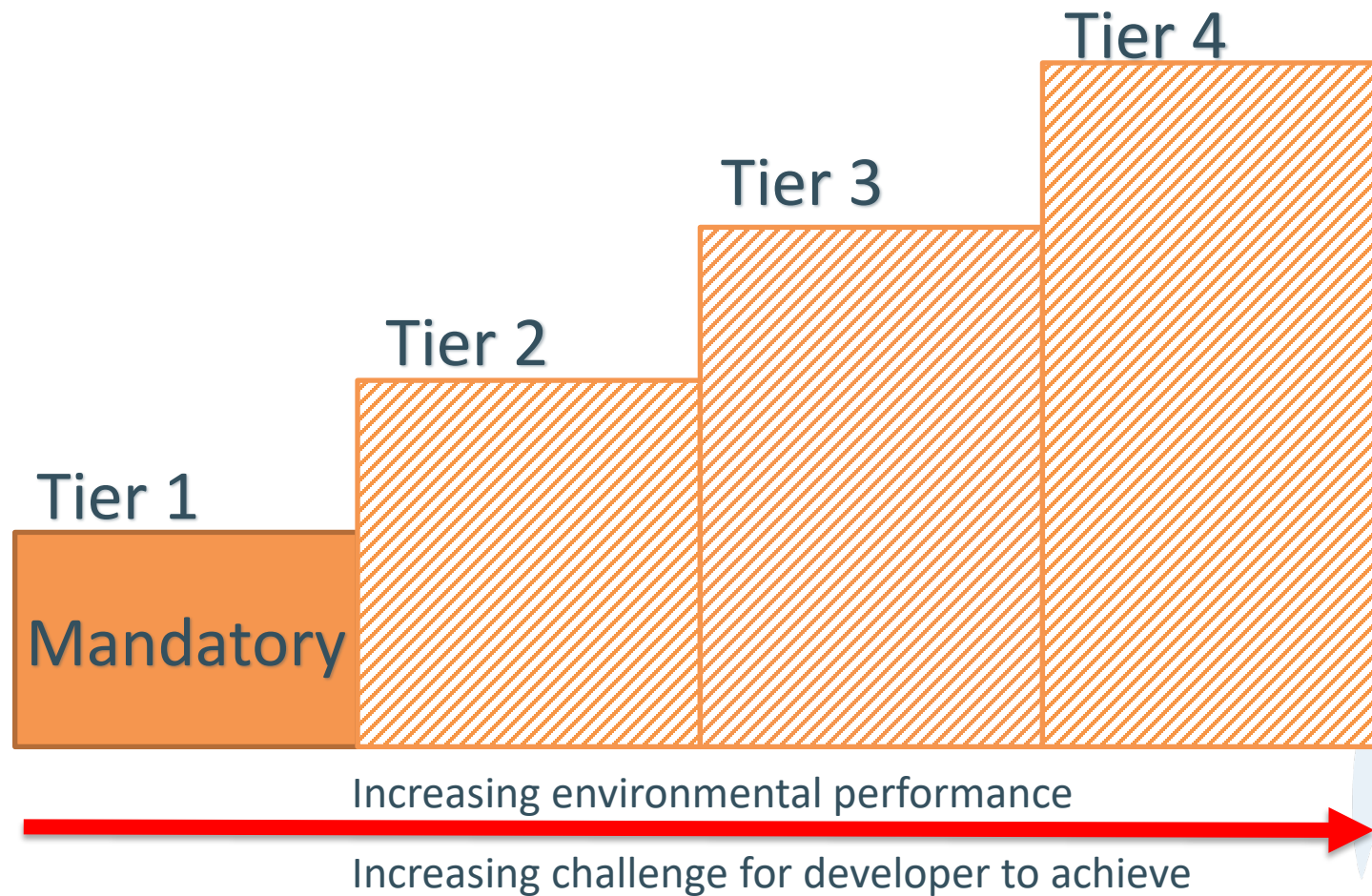


Key Outcomes of GDS for communities

- Minimize GHG emissions
- Address infrastructure costs
- Preserve the natural environment
- Create thriving, connected communities
- Improve public health
- Support the local economy
- Provide flexibility and certainty for developers



Tiered, Prescriptive Approach to GDS



Tiered Standards – Energy and Emissions

- Energy modelling requirement
- Using *Planning Act* section 41 authority to request energy modelling reports
- Key learning: Developers often only consider the upfront capital cost implications and not the operational savings or removing the need for future retrofits.



Tiered Standards – Stormwater Management

- Stormwater Quantity
- Provincial requirement – 5 mm (so far)
- Green Standards (10, 15, 25 mm)
- Secured via report identifying measures (LID, pond, bioswales, etc)
- Often signed off by stormwater professional



GDS Examples in Ontario

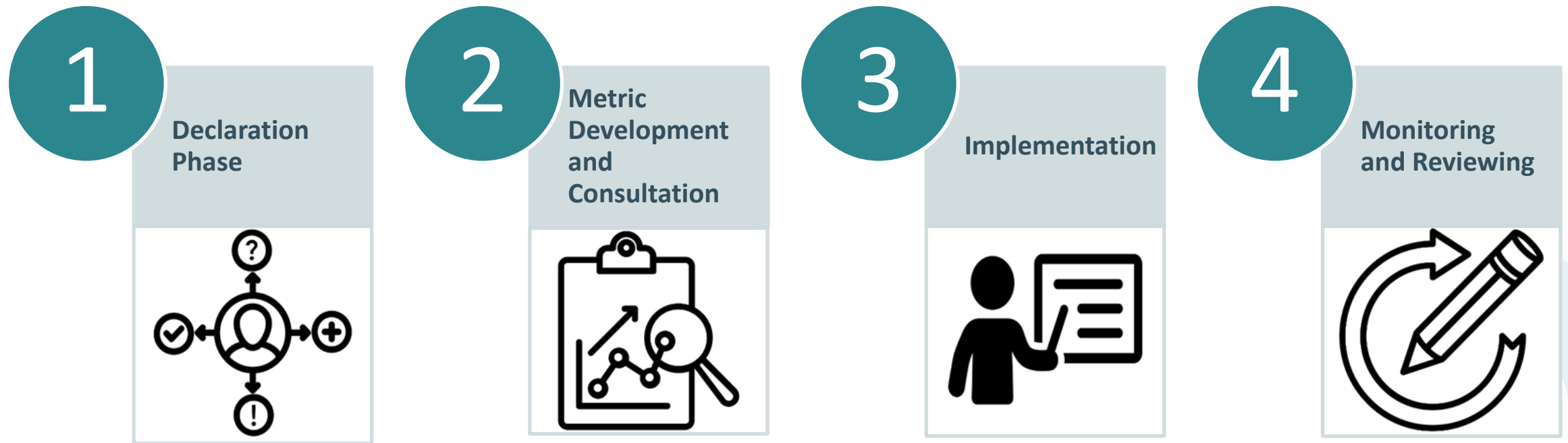


Municipalities Working on GDS

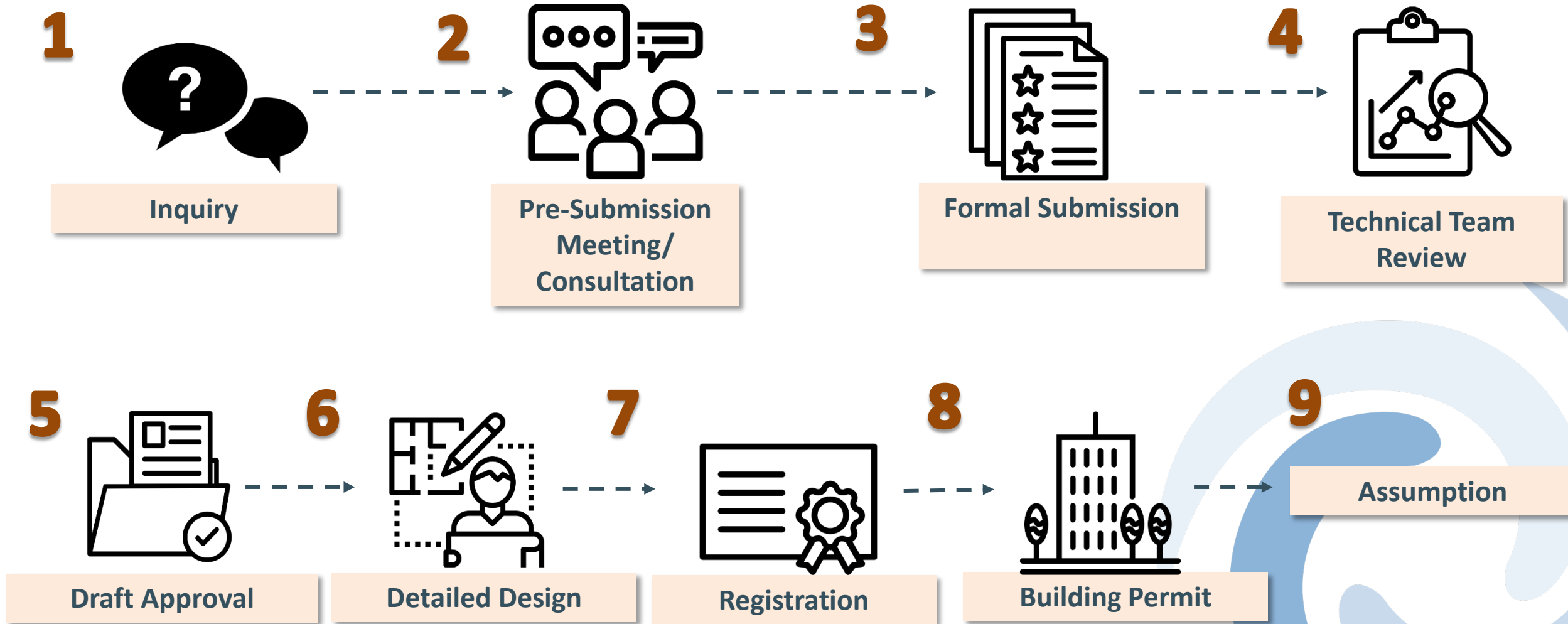


Clean Air Partnership

The Milestone Framework for Implementing GDS in your Municipality



Green Development Standards (GDS) Implementation Process



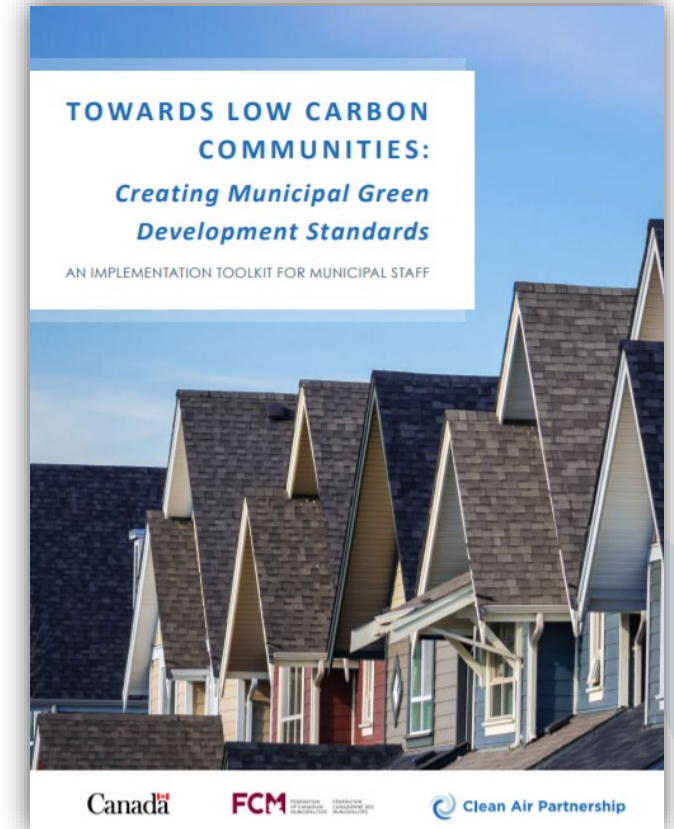
Potential Incentives for Green Development

1. Community Improvement Plans
2. Development Charge Rebates
3. Tax Increment Based Grants
4. Expedited Approval Process
5. Recognition Program
6. Density/Height Increases
7. LIC Financing



CAP's GDS Toolkit

- **Helps municipal staff:**
 - Communicate to decision makers the value of GDS
 - Understand the legislative authority for creating GDS
- **Provides:**
 - A way to discuss sustainability metrics with developers right from the beginning
 - A milestone framework for tracking your progress with GDS
 - Resources, education for staff and stakeholders
 - Sample metrics to be used in developing your own GDS
 - [Briefing Note](#)



2023-2026 Environmental Action Committee Work Plan – October 2023

WORK PLAN ITEM	ACTION FOR EAC MEMBERS	TIMING	PROGRESS <i>Action Taken or Date Completed</i>
Climate Change	Support approval and implementation of the Climate Change Action Plan	Ongoing	
Volunteering	Participate in volunteering opportunities as members of the Community Green Leaders volunteer program	Ongoing	
Support City Action on Environment	Be prepared to comment on City-led items brought forward to EAC meetings (E.g., strategic plans, by-laws)	At EAC meetings	June 6, 2023 - LJ Prabakaran, Environmental Outreach Assistant and Tooba Shakeel, Senior Coordinator, Sustainable Neighbourhoods, Credit Valley Conservation regarding Planning the Cooksville Sustainable Neighbourhood Action Program (SNAP) EAC-0013-2023
			July 4, 2023 – Ibrahim Dia, Planner regarding 2024 Future Directions Parks, Forestry & Environment EAC-0016-2023

2

2023-2026 Environmental Action Committee Work Plan – October 2023

			September 5, 2023 - Dianne Zimmerman, Manager, Environment regarding a summary on the Environmental Action Committee Work Plan EAC-0021-2023