

ATTACHMENT 4

SUSTAINABILITY METRICS UPDATE - SUMMARY OF REVISIONS TO METRICS

The proposed revisions to the Sustainability Metrics include: 1. metrics proposed for removal; 2. metrics proposed for minor revisions; 3. metrics proposed for major revisions; and 4. metrics proposed to be added. Updates were also made to metric format, nomenclature, and metrics program guidebook. This document provides a summary of the metric changes.

1. Metrics Proposed for Removal

Eleven (11) metrics are proposed for removal, as outlined in this Section below.

1.1 The following Metrics are proposed for removal due to redundancy with current requirements, including requirements in the Official Plans and/or Zoning By-laws of the partner municipalities Vaughan, Richmond Hill, Brampton and Markham, and/or provisions in the *Ontario Building Code, 1992 (2020 Consolidation)*.

- Floor Area Ratio/Floor Space Index
- Persons and Jobs per Hectare
- Urban Tree Diversity
- Water Conserving Fixtures
- Parking Garage Lighting

1.2 The following Metrics are proposed for removal as they were no longer necessary (captured in another metric), difficult to verify/enforce, or industry taking different approach.

- Energy Conserving Lighting
- Proximity to School
- Tree Canopy Enhancements
- Material Reuse and recycled content
- Recycled/Reclaimed Materials
- Surface Parking

2. Metrics Proposed for Minor Revisions

Eleven (11) metrics are proposed for minor revisions, as outlined in this Section below. These metrics were updated to improve clarity of metric intent and requirements.

2.1 The following metrics proposed for minor revisions were also renamed to align more accurately with the metric intent and benefits.

- Surface Parking Footprint
- Access to Public Parks
- Greywater Reuse
- Multi-purpose Stormwater Management

ATTACHMENT 4

SUSTAINABILITY METRICS UPDATE - SUMMARY OF REVISIONS TO METRICS

2.2 Adjustments were made to the point allocations for the specific metrics listed below based on feedback, uptake, and desire to incentivize certain metrics.

- Distance to Public Transit
- Implementing Trails and Bike Paths
- Traffic Calming
- Stormwater Quality
- School Proximity to Transit Routes and Bikeways
- Intersection Density
- Passive Solar Alignment

3. Metrics Proposed for Major Revisions

Thirty (30) metrics are proposed for major revisions as outlined in this Section below. Major revisions addressed shifts in the building and development industry, and green development frameworks (e.g. LEED, LBC, etc). Major revisions also reflect past uptake by adjusting the targets and/or point allocations for metrics that had a low or high uptake. If the past uptake was high, metrics were updated with more challenging targets. If the past update was low, metrics were updated with less challenging targets.

- Buildings designed/certified under accredited 'Green' rating system
- Universal Design
- Universally Accessible Points of Entry
- Natural Heritage System Enhancements
- Preserve existing healthy trees
- Soil quantity and quality for new trees
- Enhancing urban tree canopy and shaded walkways and sidewalks
- Proximity to basic amenities/lifestyle amenities
- Design for Life Cycle Housing
- Bicycle Parking
- Carshare & Carpool Parking
- Connection to Natural Heritage
- Cultural Heritage Conservation
- Block Perimeter and Length
- Promote Walkable Streets
- Pedestrian Amenities
- Proximity to Active Transportation Network
- Stormwater Quantity
- Stormwater Quality
- Solar Readiness
- Dedicate Land for Private Fruit and Vegetable Garden Space
- Healthy Soils
- Solid Waste
- Reduce Light Pollution
- Reduce Potable Water Use
- Energy Management
- Bird Friendly Design
- Building Energy Efficiency and Emissions
- Reduce Heat Island - Non-Roof
- Reduce Heat Island - Roof

ATTACHMENT 4

SUSTAINABILITY METRICS UPDATE - SUMMARY OF REVISIONS TO METRICS

4. New Metrics Proposed to be Added

Fourteen (14) new metrics are proposed to be added, as outlined in this Section below. The metrics listed reflect best practice in green development and/or are based on provincial, municipal, and consumer trends.

- Supporting Pollinators
- Salt Management
- Sub Metering of Thermal Energy and Water
- Innovation
- Community and Neighbourhood Scale*
- Intersection Density*

*NOTE: New to the City of Richmond Hill only.

4.1 A portion of the new metrics proposed also address the growing awareness of importance of carbon associated with building materials:

- Embodied Carbon of Building Materials - Supplementary Cementitious Materials
- Embodied Carbon of Building Materials - Life Cycle Assessments
- Embodied Carbon of Building Materials - Material Efficient Framing

Embodied carbon is the lifetime greenhouse gas emissions associated with building materials. The new proposed Embodied Carbon metrics encourage retention and reuse of building materials and reductions in greenhouse gas emissions. They are implemented by using certain building materials (e.g. Supplementary Cementitious Materials) and efficient framing (e.g. wood), and completing Lifecycle Assessment. These metrics are proposed to replace previous metrics related to recycling/reusing materials as a more current standard.

4.2 A portion of the new metrics proposed also focus on climate change adaptation: encouraging more resilient construction for extreme weather events, and/or reducing energy use.

- Back-up Power
- Extreme Wind Protection
- Controlling Solar Gain
- Providing Mixed-Use Development
- Electric Vehicle (EV) Charging Stations

The new proposed EV charging stations metric encourages use of EVs, which can help reduce GHGs and air pollution, and aims to provide charging stations to serve 10% to 50%+ of parking spaces.