

**Environment and sustainability: Section 20.15**

**Affordability: Section 20.6.3**

**CPPS: 28.15**

# The Green environment - towards net-zero

Damaging construction  
Inefficient buildings  
Maybe affordable,  
Environmental vandalism

Net zero operation  
Low impact development  
100% recycled waste  
Expensive,  
No developer interest



Incentives (Development charge rebates)



Guidance: TGS (Toronto Green Standard)



Certification



## Toronto Green Standard

In December 2021, City Council adopted the [Net Zero by 2040 Climate Strategy](#) and accelerated the Toronto Green Standard (TGS) implementation dates for the Greenhouse Gas Emission limits to 2025 and 2028 so that buildings constructed on or after 2030 are near zero emissions

Financial incentives are offered through the [Development Charge Refund Program](#) for eligible and verified Tier 2, 3 or 4, high performance, low emissions projects.

# Toronto Green Standard: Tier 1,2,3,4

## **Air quality: Performance measures for low emissions transportation and mobility**

EV infrastructure: All parking spaces, Level 2 charger. Chargers for bike Parking, etc.

Bicycle infrastructure

Pedestrian infrastructure

## **Buildings energy, emissions and resilience.** Performance measures to optimize energy efficiency, reduce GHG emissions and enhance building resilience to extreme weather

Operational emissions

Embodied emissions in materials

Resilience

Operational systems verification

Mid to High-Rise Residential & Non-Residential Version 4



The Arbour, George Brown College, Moriyama & Teshima Architects and Acton Ostry Architects

## **Water Quality and efficiency** - stormwater, green infrastructure, potable water reduction

## **Ecology and Biodiversity** - enhance urban forest, increase biodiversity, minimize urban heat island

## **Waste and the circular economy**

## Burlington CPPS definition

**Shall:** The provision or standard is mandatory or it is required to comply with a provision or standard

**Should:** The provision or standard is directive and a professional planning rationale is required in order not to fully comply with a provision or standard.

My count: OPA sustainability: 13 “should’s”. 2 “shall’s”

# Comparison of OPA to Toronto Green Standards

## Some examples

OPA:

20.15.1 Development **should**:

**Identify opportunities** to implement renewable energy generation in proposed development, with a focus on reducing carbon emissions

TGS

*Building Energy performance: projects must target the minimum Total Energy Use Intensity (TEUI) and Thermal Energy Demand Intensity (TEDI) requirements outlined in table below or better*

OPA:

**Development should...** Incorporate bird friendly design strategy elements

TGS

*Use a combination of the following strategies to treat a minimum of 85% of all exterior glazing within the first 16 m of the building above grade, or to the height of the mature tree canopy, whichever is greater: 1,2,3,4,5*

- *Visual markers applied to the 1st surface of glass with a maximum spacing of 50 mm x 50 mm;*
- *Building-integrated structures to mute reflections on glass surfaces; or,*
- *Non-reflective glass.*
- *Areas where visual markers are required include: 6,7*
- *Balcony railings and fly-through conditions;*
- *Elevations facing a High Hazard Area.*

OPA 20.15.2

Development shall incorporate high quality durable building materials for en

TGS

*Conduct an Upfront Embodied Emissions Assessment for the structure and envelope in accordance with the CAGBC Zero Carbon Building Standard methodology for the Upfront Carbon lifecycle stages (A1-A5). Identify and specify low-carbon sustainable material alternatives to the proposed structure and/or envelope for use in the building project. **The report must demonstrate an emissions intensity of equal to or less than 250 kgCO<sub>2</sub>e/m<sup>2</sup>.***



## District Energy

District energy is a key component of [TransformTO](#), Toronto's climate action plan,

- District energy systems typically consist of a heating and cooling centre, and a thermal network of pipes connected to a group of buildings.
- Reduce greenhouse gas emissions and improving energy resilience,
- Economies of scale
- Use of less carbon-intensive fuel sources, such as solar thermal, sewer heat, biogas, cold lake water, biomass and ground heat, and integrate them at an energy centre with virtually no impact on the connected buildings.

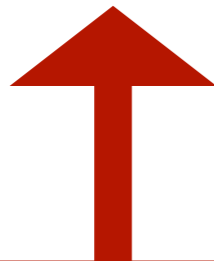
### Amendment:

Consider feasibility of District Energy in Midtown and include as an option in OPA

# The Green environment - towards net-zero

Cheap,  
Polluted,  
Maybe affordable,  
Environmental vandalism

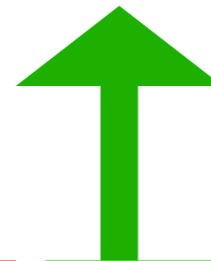
Net zero operation  
Low impact development  
100% recycled waste  
Expensive,  
No developer interest



85 concrete and steel towers, 35-45 storeys

Words like: “should”; “target”

Rather than shall and specific performance criteria



**We should aim and incentivize towards here at least!**

**The planet won't wait.**

## **The Green environment - towards net-zero**

April 25, 2022: Oakville Council approved the adoption of a Net Zero Carbon target for 2050 for all corporate activities, in alignment with the federal Pan-Canadian Framework

**This OPA is weak on environment - it tends to leave the choice to the developer. It has all the right words, but lacks specifics and teeth.**

### **Amendment:**

**Consider adoption of TGS Tier 1,2,3 4 standards or similar and incorporate into OPA and CPPS / zoning by reference. All development shall conform to Tier 4, etc.**

**Strengthen and be more specific in environmental requirements, as per TGS.**

# Noise!!



*Distrikt application: Noise Feasibility Study,*

*“The study finds that the traffic noise exceeds the MECP sound level criteria during daytime and nighttime hours at the proposed development”*

**“...predicted sound level is 72 dBA, well in excess of the MECP limit of 55 dBA.”  
(Actually 4x as loud as 50 db)**

“Warning clauses should be included in the development agreements, purchase and tenancy agreements and offers of the purchase and sale for the dwelling units”.

**Amendment: Consider redesign of overall site:**

**Acoustic barriers along QEW (who pays?)**

**Offices, parking structures, commercial form a barrier along QEW**

**Residential and schools within this barrier and primarily facing South.**

# The Affordability problem

Affordable

Expensive



- Real estate is an investment activity - not a community building industry
- Money is now 4-5 times more expensive than when it was basically free
- Excess land costs and construction costs prevent developers from offering affordable housing.
- Often those most in need are families who cannot afford multi-bedroom units.
- Landowners get rich. Public get priced out.

# The Affordability problem

Affordable

Expensive



## • Possible Tools: White paper: March 2024

- Money is now 4-5 times more expensive than when it was basically free
- Excess land costs and construction costs prevent developers from offering affordable housing except for the smallest 500 sq ft range of unit. **CPPS to streamline development, reduce application and finance costs**
- Often those most in need are families who cannot afford multi-bedroom units. **Target affordability funds to families and multi-bedroom units, not generically**
- Landowners get rich. **Inclusionary Zoning may reduce land values**

# The Affordability problem

Affordable

Expensive



- *White paper: March 2024: Community Planning Permit System By-law within Midtown Oakville - would assist in*
  - *ensuring that these approvals result in the provision of affordable housing as well as other community benefits.*
  - *... in exchange for an increase in height and/or density of development*
- **Providing a lower FSI and height starting point in the OPA than currently proposed will give more room to negotiate affordable housing under a CPPS by-law.**

## Amendment:

### **Strengthen the OPA policies for affordability**

**a). Lower FSI and heights in all precincts to give more room to negotiate upwards in exchange for affordable housing in accordance with a CPPS**

**b) Strengthen the OPA policies for affordability - adopt clearly the White Paper recommendations:**

**c) Make more explicit the use of CPPS to be the By-law for implementation of the OPA, together with Inclusionary Zoning and Community Improvement Plan.**

# Implementation via CPPS - the devil is in the details

- A plea for a collaborative and partnership approach to CPPS by-law
- We have been assured that zoning or CPPS will specify core liveability components - building form, density, heights, massing, streets, parks etc.
- The OPA is high level policy. The public should be involved and provide input to the detailed implementation in the CPPS to help create a Liveable Community.
- Let us make the CPPS for Midtown a great example 3P collaboration.