



City Of Kingston

Ontario

By-Law Number 2021-175

**A By-Law to Adopt the Green Standard Community
Improvement Plan**

Passed: November 3, 2021

By-Law Amendments:

By-Law Number	Date Passed
2023-64	April 4, 2023

By-Law Number 2021-175

A By-Law to Adopt the Green Standard Community Improvement Plan

Passed: November 2, 2021

Whereas By-law Number 2021-174, passed on the 2nd day of, November 2021, designated the Community Improvement Project Area for this Green Standard Community Improvement Plan; and

Whereas Section 28(4) of the *Planning Act* states that where a by-law has been passed to designate a community improvement project area, the Council may provide for the preparation of a plan suitable for adoption as a community improvement plan for that community improvement project area; and

Whereas “community improvement” is defined in Section 28(1) of the *Planning Act* as “the planning or replanning, design or redesign, resubdivision, clearance, development or redevelopment, construction, reconstruction and rehabilitation, improvement of energy efficiency, or any of them, of a community improvement project area, and the provision of such residential, commercial, industrial, public, recreational, institutional, religious, charitable or other uses, buildings, structures, works, improvements or facilities, or spaces therefor, as may be appropriate or necessary”; and

Whereas the Council of The Corporation of the City of Kingston considers it appropriate to adopt a Green Standard Community Improvement Plan in accordance with the *Planning Act*, for the purposes of community improvement of the corresponding Community Improvement Project Area, through various municipal initiatives as set out in the community improvement plan; and

Whereas Council, by its Planning Committee, held a public meeting on July 15, 2021 to discuss and receive public input regarding the adoption of the Green Standard Community Improvement Plan and has taken all of the other required steps prior to the enactment of this By-Law to adopt a Green Standard Community Improvement Plan in the Community Improvement Project Area as required by the *Planning Act*; and

Whereas the City has prepared a plan entitled “Green Standard Community Improvement Plan” attached hereto as Schedule ‘A’ and forming part of this By-Law.

Therefore be it resolved that the Council of The Corporation of the City of Kingston, in accordance with the provisions of Section 28 of the *Planning Act*, R.S.O. 1990, c.P13, hereby enacts as follows:

1. Green Standard Community Improvement Plan annexed hereto as Schedule 'A' and forming part of this By-Law is hereby adopted as the Green Standard Community Improvement Plan for the Community Improvement Project Area designated by By-Law Number 2021-174.
2. This By-Law shall come into force and take effect in accordance with the provisions of the *Planning Act*.

This By-Law was Given Third Reading and Passed November 3, 2021

Schedule A attached to PDF Copy

City of Kingston

Green Standard

Community Improvement Plan

Adopted by the Council of the Corporation of the City of Kingston on November 3, 2021 (By-law Number 2021-175).

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Glossary Of Terms

Net Zero energy (NZe) building: a building which captures/harnesses as much energy-on-site as it consumes on a yearly basis.

Net Zero ready (NZr): means that a building is constructed to a high efficiency and building envelope levels but does not include all the renewable energy on site to achieve NZe.

Renewable Energy: means resources that are derived from natural processes which are replenished at a rate equal or faster than the rate at which they are consumed such as the sun, wind or geothermal energy.

Zero Carbon Building – a highly energy-efficient building that produces onsite, or procures, carbon-free renewable energy or high-quality carbon offsets to counterbalance the annual carbon emissions from building materials and its operation.

1.0 Introduction

It is recognized that incorporating sustainability in local land use planning and development policies significantly influences the way we design and build our communities and the impact on our quality of life. The City of Kingston acknowledges the importance of sustainability and its ability to address various issues such as energy and water use, transportation, public health, economic development, environmental protection and climate change.

Municipalities in Ontario, allowed under the *Planning Act*, can make use of Community Improvement Plans (CIP) to offer incentives related to the energy efficiency of land and buildings. This Green Standard For Buildings Community Improvement Plan (hereafter referenced as “Green Standard CIP”) will encourage the construction of buildings or the use of land, in a way that achieves measurable improvement or efficiency in energy. This will be achieved through the provision of programs which could make grants, loans, refunds, exemptions, tax increment-equivalent financing or other incentives and assistance available, in accordance with qualifying programs and available funding.

1.1 Organization of the Green Standard CIP

The Green Standard CIP includes the following components:

- General information on community improvement planning;
- Review of the legislative authority supporting the establishment of the CIP;
- Identification of the CIP project area, purpose, goal and objectives, and program parameters;
- CIP building performance levels and associated incentive program details; and,
- an overview of the CIP administration.

1.2 General Information on Community Improvement Planning

Common to all municipalities is the need to build, reinforce or reshape themselves to meet global challenges and residents’ future needs in a sustainable way that delivers a high quality of life. Community improvement planning, one of the many community

planning tools found in the *Planning Act*, can help municipalities address some of these challenges, as it provides a means of planning and financing activities that relate to the effective use, reuse or restoration of lands, buildings and infrastructure.

Through a Community Improvement Plan, municipalities can:

- focus public attention on local priorities and specific municipal initiatives;
- target areas in transition or in need of repair, rehabilitation and redevelopment;
- facilitate and encourage community change in a coordinated manner; and,
- stimulate private sector investment through municipal incentive-based programs.

Community improvement project areas may range from specific properties and employment areas to streets, neighbourhoods, or as is the case with this Green Standard CIP, within the boundary of the City of Kingston. Program coverage can span a wide spectrum of municipal objectives from municipally driven programs relating to infrastructure works, to incentive-based programs providing grants, loans or tax increment-equivalent financing.

Cities across Ontario have previously used Community Improvement Plans for residential neighbourhood restoration, commercial area improvements, incentives for enhancing or redeveloping the downtown, adaptive re-use and brownfield remediation. Common to these and all CIP programs is the alteration of the physical landscape of communities so that public benefits can be achieved, resulting in more socially cohesive, environmentally friendly and/or economically sound communities.

2.0 Legislative Authority and Policy Direction

2.1 Provincial

2.1.1 Planning Act and Municipal Act

The *Planning Act* provides the statutory framework for the development of Community Improvement Plans (CIPs) in the Province of Ontario. A CIP is a tool that allows the City to direct funds and implement policy initiatives toward a specifically defined Community Improvement Project Area. Section 28 of the *Planning Act* allows municipalities, where

community improvement policies are set out in their Official Plan, to designate by by-law a Community Improvement Project Area and to prepare a CIP for that Community Improvement Project Area. Section 365.1 of the *Municipal Act, 2001* provides that where a Community Improvement Project Area has been designated and a Community Improvement Plan is in effect in accordance with Section 28 of the *Planning Act*, the CIP may also provide a tax cancellation program specific to brownfield rehabilitation.

Community improvement “means the planning or replanning, design or redesign, resubdivision, clearance, development or redevelopment, construction, reconstruction and rehabilitation, improvement of energy efficiency, or any of them, of a community improvement project area, and the provision of such residential, commercial, industrial, public, recreational, institutional, religious, charitable or other uses, buildings, structures, works, improvements or facilities, or spaces therefor, as may be appropriate or necessary” (*Planning Act*, Part IV Section 28(1)).

Directly related to the focus of this CIP are changes made to the *Planning Act* which add the improvement of energy efficiency to the definition of “community improvement”; and the provision of energy efficient uses, buildings, structures, works and improvements or facilities, to the scope of eligible costs for which municipalities can provide community improvement grants or loans.

Specifically, Part IV Section 28 of the *Planning Act* includes the following:

“Grants or loans re eligible costs:

(7) For the purpose of carrying out a municipality’s community improvement plan that has come into effect, the municipality may make grants or loans, in conformity with the community improvement plan, to registered owners, assessed owners and tenants of lands and buildings within the community improvement project area, and to any person to whom such an owner or tenant has assigned the right to receive a grant or loan, to pay for the whole or any part of the eligible costs of the community improvement plan.

Eligible costs

(7.1) For the purposes of subsection (7), the eligible costs of a community improvement plan may include costs related to environmental site assessment,

environmental remediation, development, redevelopment, construction and reconstruction of lands and buildings for rehabilitation purposes or for the provision of energy efficient uses, buildings, structures, works, improvements or facilities.”

2.1.2 Provincial Policy Statement

The Provincial Policy Statement (PPS) is the primary provincial land use policy document guiding municipal decision-making. The *Planning Act* requires that decisions on land use planning matters “be consistent with” the PPS. As a key part of Ontario’s policy-led planning system, the Provincial Policy Statement sets the policy foundation for regulating the development and use of land. It also supports the provincial goal to enhance the quality of life for all Ontarians.

The 2020 Provincial Policy Statement is based on building strong healthy communities. Specifically, Policy 1.8 of the PPS provides policy direction to planning authorities on how they 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.

2.1.3 Ontario Building Code (OBC)

The OBC is the mandatory and minimum construction compliance benchmark within the province. The current OBC refers to the National Energy Code for Buildings (NECB 2017) and includes a supplementary standard (SB-10 and SB-12) which includes energy efficiency requirements for new building construction. The OBC also has prescriptive, performance and energy modelling requirements that achieve efficiency levels for new houses equivalent to moderate performance levels related to the most recent National Building Code (NBC 2015).

The levels of energy efficiency established within the OBC standards are intended to increase every several years and have been adjusted to match industry adoption of best practices in energy and water conservation. Newer versions of building and energy codes can also be used to establish the pathway incrementally over time to a set goal, rather than follow industry standards. The Canadian Commission on Building and Fire Codes has indicated that energy requirements within national codes can affect up to 81% of energy

use in houses and 68% in other buildings while lowering GHG emissions and operational costs. As such, the upcoming versions of the NECB and NBC have a strong focus on energy efficiency and set an incremental path to higher performance new buildings.

Updated versions of the NECB/NBC will be adopted semi-annually by Ontario for harmonization as part of the Pan-Canadian Framework established in December 2016 and agreed to by provincial and territorial Energy Ministers under Canada's Energy Strategy . Under this strategic framework, tiered national building and energy codes will incrementally reach net zero (energy) ready in the next 10 years.

(By-Law Number 2021-175; 2023-64)

2.2 Local

2.2.1 City of Kingston Official Plan (OP)

The City of Kingston Official Plan was adopted by Council on June 15, 2009 and was approved by the Ministry of Municipal Affairs and Housing (MMAH) on January 6, 2010. Official Plan Amendment Number 50, being the five-year update to the Official Plan was adopted by Council on March 7, 2017 and approved by the MMAH on August 8, 2017. The OP includes policies regarding 'Community Improvement' (Section 9.8). The objective of the Community Improvement policies in the Official Plan is to maintain, improve and rehabilitate various residential, commercial and industrial sections of the City.

Section 2.1 of the OP outlines the City's strategic policies for attaining sustainable development in the community. These policies include conserving natural and built resources; reducing pollution and rehabilitating polluted areas; applying conservation practices; reducing energy consumption; promoting green infrastructure; enhancing the green economy and low carbon economy. Sections 3.4, 3.6, and 6.2 also outline guidance and support to influence green building features as well as the use of renewable and distributed energy resources.

Community Improvement Policy 9.8.2 of the Official Plan states that:

“The community improvement policies of this Plan are enabling policies under the *Planning Act*. The Community Improvement Area applies to all lands within the municipal boundary. It is the intent of Council that the Community Improvement Area may be designated, in whole or in part, by by-law, as one or more defined community improvement project areas for which detailed community improvement plans will be prepared.” In addition, Section 9.8.7 j. (Objectives for Community Improvement Areas) of the Official Plan, contains policies to improve the environmental impacts of development and specifically to improve energy efficiency and reduce carbon emissions where feasible.

2.2.2 2019 - 2022 Strategic Plan

City Council's 2019-2022 Strategic Plan includes a priority to Demonstrate Leadership on Climate Action and a goal to develop and promote incentives for residents to reduce their energy use and become part of city-wide solutions to meet Kingston's carbon neutral target. A strategic action under this goal directs staff to develop a new building construction net-zero policy and incentive program using a Community Improvement Plan model. The Green Standard CIP includes the framework and related programs that supports implementation of this action to help shape future development within the City.

3.0 Green Standard CIP

3.1 Community Improvement Project Area

. All the lands within the City of Kingston are designated as a Green Standard Community Improvement Project Area

3.2 Purpose

The purpose of the Green Standard CIP is to support and implement provincial and local policies and strategies relating to energy and climate change. This will be achieved through incentive programs which could offer grants, loans, refunds, exemptions, tax incremental rebates, financing or other incentives and assistance available to project

proponents, subject to available funding.

Qualifying incentive programs forming part of the Green Standard CIP are outlined in Section 5.0 (Green Standard CIP Programs) and are designed to meet the goal of this Green Standard CIP.

3.3 Goals and Objectives

The goal of the Green Standard CIP is to encourage the construction of new buildings or the use of land in a way that achieves significant and measurable improvement in energy performance.

Objectives that support the fulfillment of this goal include the following:

1. Establish an incentive program through a Community Improvement Plan model that assists property owners with the increased costs of voluntarily constructing new buildings to performance levels higher than the OBC.
2. Provide education and training supports to increase the local understanding and capacity of property owners and developers to construct high performance new buildings.
3. Stimulate economic competitiveness and innovation in the local building sector to voluntary move towards achieving Net Zero energy levels within new buildings prior to their inclusion in related provincial codes and standards.
4. Support achieving Kingston's community GHG emission reduction targets and aim for carbon neutrality.

Successful implementation of Green Standard CIP is expected to provide the following benefits:

- Meet community GHG reduction targets more cost effectively in new construction rather than retrofitting them later;
- Stimulate economic growth in advanced building technology and renewable energy sectors including creation of related skilled-trades and professional jobs and increased green building experience / expertise among local builders and contractors;

- Achieve life-cycle value through operation and maintenance savings including reduced utility bills freeing up disposable income that can increase local economic activity;
- Enable building users to protect against rising energy and carbon costs;
- Provide greater comfort, improved health and productivity for employees and residents using the space; and,
- Increased public recognition / normalization of green building standards among local property owners, constructors, realtors and finance/insurance professionals.

Monitoring of program outcomes is addressed in Section 6.1 .

3.4 Program Parameters

Programs qualifying under the Green Standard CIP shall meet the following parameters:

- i. Program(s) may offer grants, loans, refunds, exemptions, tax increment-equivalent financing or other incentives and assistance to registered owners, assessed owners and tenants of lands and buildings within the community improvement project area, and to any person to whom such an owner or tenant has assigned the right to receive such financial incentive to pay for the whole or any part of the eligible costs of the community improvement plan, subject to available funding.
- ii. Financial assistance shall not be issued for work located on property in property tax or utility arrears or any other arrears owing to the City or related entities.
- iii. The total of grants, loans or other financial assistance provided under a program is limited to the amount of the eligible costs defined in the program.
- iv. Program(s) shall relate directly to achieving energy objectives and shall address but not necessarily be limited to one or more of the following:
 - a) air quality through the reduction of emissions harmful to the environment including those associated with impacting climate change;
 - b) energy efficiency and conservation through energy demand

management to reduce energy consumption, and design or product standards that result in more energy efficient green buildings and development;

- c) energy generation through on-site or remote renewable energy systems;
 - d) energy storage and distribution for thermal or electrical energy systems, including but not limited to district energy, microgrid, smart-grid, vehicle-to-grid, virtual net metering, and micro-utility distribution concepts; and
 - e) waste management by enhancing waste reduction through composting, material re-use, recycling and waste diversion initiatives.
- v. Program(s) shall measure improvement in energy and emissions by using government or industry accepted benchmarks, certifications or standards including but not limited to Built Green/Green Seal, , EnerGuide Rating System, LEED, Living Building, National Building Code and National Energy Code for Buildings, Net-Zero energy (NZe) and Net Zero ready (NZr), Passive House, R-2000 and Zero Carbon Building Standard.
- vi. Program(s) contained in the CIP shall not commence until City Council has approved and adopted the CIP or respective amendment to the CIP as well as the budgetary resources required to support the financial assistance to be provided under the program(s).

In order to achieve scale of impact from implementation, the Green Standard CIP incentive programs are not intended for the construction of an individual dwelling. It is expected that the Green Standard CIP will be most applicable to larger developments involving the following building types:

- Multi-unit residential buildings;
- Subdivision developments of single detached dwellings, semi-detached and townhouses or row housing;
- Commercial offices including retail; and
- Residential mixed-use buildings (i.e. ground floor retail and/or office with residential above).

Specialized buildings such as in the industrial (e.g. manufacturing facilities) and institutional (e.g. hospitals) sectors often have most of their energy consumption within their operational

processes separate from the actual building performance. Therefore, the Green Standard CIP may have limited applicability to these types of buildings.

3.5 Amendments

An amendment to the CIP is required where there is:

- a. a change in the geographic area to which financial or land programs outlined in the CIP apply;
- b. a change in the purpose or goal of the CIP;
- c. a change in the eligibility criteria of a program contained in the CIP;
- d. an addition of a new program(s) to the CIP; or
- e. an increase in the proportional value of the financial incentive offered within a program contained in the CIP.

If an amendment results in the commitment of additional public dollars or the foregoing of public dollars, public notice should be given.

All amendments to the CIP shall comply with the provisions of the *Planning Act* and require pre-consultation with the Ministry of Municipal Affairs and Housing, and approval by City Council.

An amendment to this CIP is not required where:

- a. a subsidiary program within this CIP is discontinued; or
- b. funding to a CIP program is decreased or discontinued.

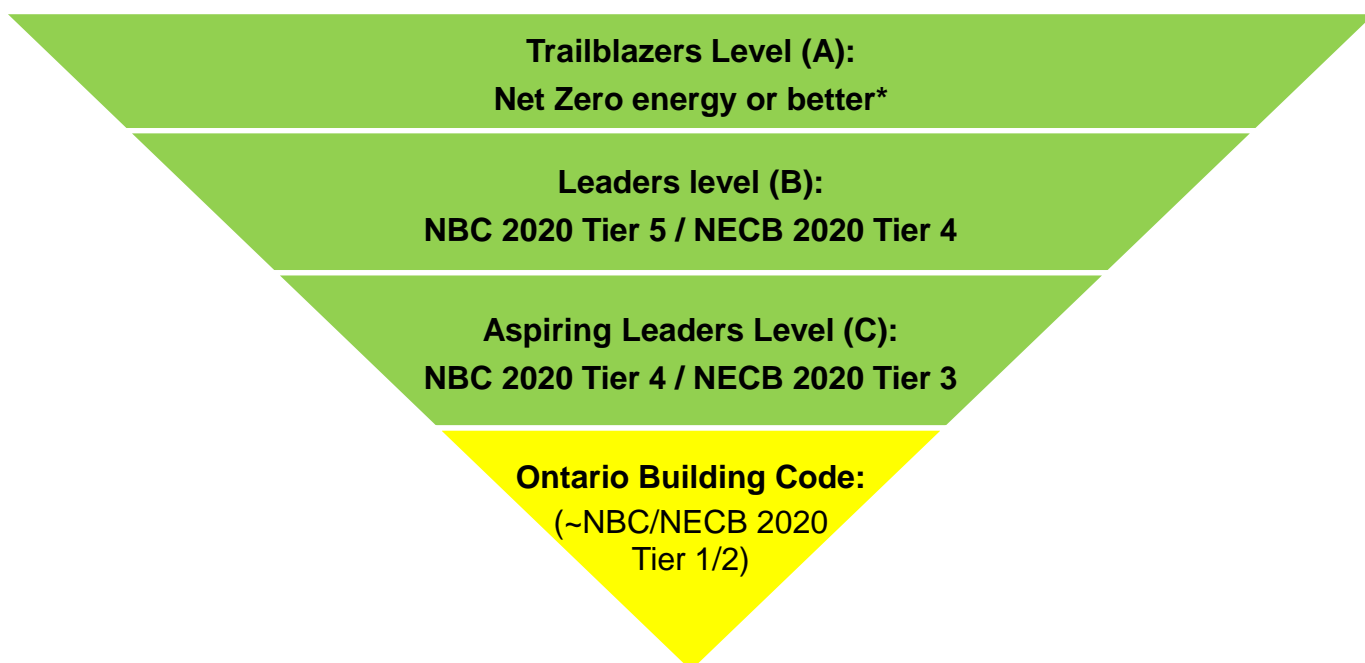
4.0 Green Standard CIP Building Performance Levels

The programs within the Green Standard CIP aim to stimulate the construction of buildings that reduce the adverse environmental impact during construction and/or enable an improvement in efficiency or environmental conservation during their operation. Building performance levels established by national codes and third-party building certification programs will be utilized to determine the proportion of the incentive offered for eligible projects as described in section 4.1 and 4.2.

4.1 Reference to National Energy and Building Codes

Incentives offered under the Green Standard CIP, as further described in Section 5, will be the highest in proportional value for achieving Net Zero energy, or equivalent performance levels as described herein, to reflect the expected higher incremental capital cost (ICC) premiums involved. Subsequently, lower levels of building performance include incrementally lower dollar value of incentives. This is graphically illustrated in the diagram below with Green Standard CIP Levels A, B and C using the proposed tiers within the forthcoming 2020 versions of the National Energy Code for Buildings (NECB) and National Building Code (NBC).

Both the NECB and NBC have been vetted through experts from across the country, as commissioned by the National Research Council of Canada, and are expected to be released by end of calendar year 2021. Any changes to the final 2020 version of the national codes will be applicable to Kingston's Green Standard CIP performance levels.



* Carbon Zero Building Standard, as certified by the Canadian Green Building Council, is an example of exceeding NZe as it includes embodied carbon within construction materials. The following table provides Green Standard performance levels for each of the national code tiers. For reference, the NECB is applicable to large buildings captured under Part 3 of the OBC whereas the NBC applies to smaller buildings captured under Part 9 OBC (up to 3 stories and under 600 m²).

GS - CIP Level	NECB 2020 Energy only	NBC 2020 (9.36.5) Energy <u>and</u> Building Envelope	
A	<----- Net Zero energy or better ----->		
B	Tier 4: 60% improvement over reference case building	Tier 5: >= 70% energy improvement over Tier 1	>= 50% envelope improvement over Tier 1
C	Tier 3: 50% improvement	Tier 4: >= 40% improvement	>= 20% improvement
- -	Tier 2: 25 % improvement	Tier 3: >= 20% improvement	>= 10% improvement
Base (Next OBCversion)	Tier 1: <25% improvement	Tier 2: >= 10% improvement	>= 5% improvement
Base (OBC 2017)	Reference case building	Tier 1: >= 0% (NBC 2015)	Not applicable

For all applicable buildings under the proposed NECB 2020, only building energy performance improvement is considered for its four tiers (i.e. excludes building envelope), each of which will compare to the modelled reference case building. The modelled performance of a Tier 1 compliant building will consume no more than 100% of the reference case building. The tier level in NECB 2020 is achieved by calculating the percentage energy use of the proposed building model compared to the reference case energy target. Only regulated loads are considered in the modelling for this national code, which excludes plug loads, elevators and process equipment.

The energy related section of the current NBC (9.36) provides prescriptive compliance requirements for the building envelope including minimum airtightness requirements, and regulated loads such as HVAC and service water heating. The NBC 2020 is expected to have a performance compliance path that provides the modelling requirement for the reference house and the proposed house. The reference house performance may be the previous 2015 version of the NBC or other level established in the final NBC 2020 version.

As each national code tier is formally adopted within the OBC, as part of the Pan-Canadian Framework agreement (see section 2.1.3), it will be removed from the Green Standard CIP

for consideration of incentives as the provincial compliance level incrementally rises. Regardless of when Ontario adopts the next versions of the NECB and NBC, the corresponding performance tiers within the final released 2020 national codes will be used to indicate the level of CIP incentivization offered for eligible buildings.

Reference to these national codes within the Green Standard CIP will help prepare the development community for the eventual corresponding levels of compliance for new building construction in Ontario.

Recently, the City of Toronto's Planning Division completed a review of Global Best Practices in Energy Efficiency Policy (Integral Group 2015) to understand the best way to implement building performance requirements. The findings showed that using an absolute performance targets-based approach consistently resulted in more buildings actually lowering their energy use than when a reference case building approach or 'percent better than' approach is used. This is because the reference case building approaches is tied to improvement relative to a reference building, instead of being tied to an absolute performance target. While there may be a significant improvement compared to the reference case building model, it may not compare to an absolute performance target, with Net-Zero Energy or Better being the highest target.

(By-Law Number 2021-175; 2023-64)

Using a targets-based approach also has the added benefit of building performance targets that don't change as building codes change from year to year, and they allow for better comparison of performance between buildings. The City of Toronto uses a targets-based approach to define minimum building performance standards in its current Green Standard (version 4), and the NECB is also looking at incorporating targets-based methods for its future versions (City of Toronto 2017). Given the value of using a targets-based approach, this Green Standard CIP will also allow building applications to use performance targets listed in the table below instead of the NECB or NBC Reference based system, in order to align with what Toronto's current Green Standard is and enable the Green Standard CIP to be able to adapt to future standards changes. The targets-based approach levels are shown as equivalencies with the Green Standard CIP Level in the previous table.

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Target Level	GS-CIP Level	GHGI (kg CO ₂ e/m ² /yr)	EUI (kWh/m ² /yr)	TEDI (kWh/m ² /yr)
4	A	<----- Net Zero energy or better ----->		
3 (NZR)	B	10	110	34
2	C	14	140	43
1	--	16	160	50

(By-Law Number 2021-175; 2023-64)

4.2 Third-party Building Certifications

As an alternative pathway to achieving the goal of the Green Standard CIP, the incentive programs are also aligned with building performance levels established through the following industry best practice third-party building construction and certification programs:

- Built Green / Green Seal, administered by Built Green Canada for mid and high-rise residential buildings;
- EnerGuide-rating System for new homes, administered by Natural Resources Canada (NRCan);
- R-2000 for new homes administered by NRCan;
- LEED (Leadership in Energy and Environmental Design), administered by Green Business Certification Inc. Canada;
- Living Building, administered by the International Living Futures Institute;
- Net-Zero (NZe) and Net-Zero Ready (NZr), administered by the Canadian Home Builders' Association; and,
- Passive House, administered by Passive Buildings Canada, the Canadian Passive House Institute.

- Zero Carbon Building Standards, as certified by the Canadian Green Building Council, which includes embodied carbon within construction materials as well as operational emissions through energy consumption during building use;

These third-party certification programs are rigorously defined and are supported by nationally respected agencies. Each offers measurable benchmarks for the design, construction and operation of high-performance green buildings. The EnerGuide Rating System (ERS) is the only standard listed above that does not include a specific performance requirement. Instead, the Green Standard CIP refers to the EnerGuide gigajoule (GJ) rating which sets out a method for modelling and determining the amount of energy that a building will use, calculated in GJ (or GHG emissions per year) with 0 as the best rating. EnerGuide is considered accurate by Canada's banking and insurance industries and it is used for finance and incentive programs across Canada.

For this alternative pathway to qualify for Kingston's Green Standard CIP incentives, program applicants must obtain third-party building certification from programs such as the examples listed in the following tables (Total Energy Use intensity (TEUI) and GHG intensity metrics are approximations).

Green Standard CIP	Program/Performance Levels for Large Buildings (OBC Part 3)	TEUI: GJ/m2/yr	GHG: kg/m2/yr
Level A	Zero Carbon Building Standards Living Building, TEUI of 0 (zero) or less	0	0
Level B	LEED Platinum, Passive House, TEUI 50% < OBC	100	10
Level C	LEED Gold, Built Green-Green Seal Platinum, TEUI 30% < OBC	140	14
No incentive	LEED Silver, Built Green – Green Seal Gold, TEUI 20% < OBC	160	16
Compliance	Ontario Building Code (2017)	200	20

Green Standard CIP	Program/Performance Levels for Small Buildings (OBC Part 9)	EnerGuide score (GJ = Gigajoule)
Level A	Net-Zero Energy	0 GJ
Level B	Net-Zero Ready, Passive House, LEED Platinum	<30 GJ
Level C	LEED Gold, Built Green-Green Seal Platinum, R-2000	<50 GJ
No incentive	ENERGY STAR, LEED Certified/Silver, Built Green Silver	<80 GJ
Compliance	Ontario Building Code (2017)	100 GJ

There is no CIP incentive program for the level immediately above current code compliance as the next iteration of the OBC is expected to improve to near equivalent energy use levels indicated within the tables. The intent of the Green Standard CIP is to incentivize leadership in building design towards the construction of advanced and higher performing buildings that aim to optimize energy and emissions improvements over what is required by provincial code.

For the Green Standard CIP incentive levels A, B or C, regardless of the performance benchmark used to qualify for incentives (i.e. national code or third party building certification), independent modelling by a qualified professional will be required to target performance level prior to construction as well as verification upon commissioning of the building. The professional conducting the performance verification of the fully constructed building cannot be employed by the developer/property owner or be the same personnel or consultants involved in the original building design.

Regardless of the type of building, national code or third-party building certification

referenced, Kingston's Green Standard CIP incentive programs also require that all Green Standard CIP applications include the following metrics within their building design, energy modelling reports at the pre-construction stage as well as verification of the as built performance upon commissioning of the completed building:

- Thermal Energy Demand Intensity (TEDI), to ensure resilient buildings that improve both occupant comfort and thermal energy performance;
- Total Energy Use Intensity (TEUI), to ensure buildings with low overall energy-use and utility costs; and,
- GHG Intensity, to encourage low-carbon energy sources and reduce building emissions.

Intensity calculations must be prepared by a licensed Professional Engineer or other qualified professional and reported in a manner consistent with the program requirements set out within the applicable national energy or building code or third-party green building certification program. The City, at its sole discretion, may also require mandatory air tightness testing post-construction to the building to compare with the as designed modelling of performance.

Upon City Council approval of the Green Standard CIP, an application guidebook, checklists and other tools will be developed to provide more process details, clarity and support to applicants including energy modelling guidelines based on current best practices in advanced building science.

5.0 Green Standard CIP Incentive Programs

The Green Standard CIP includes a suite of incentives that enable developers and property owners to recoup a portion of the ICC incurred to voluntarily construct new buildings to the higher performance levels under the Green Standard CIP. The mix of incentives offered aim to optimize influence on the development community while balancing affordability to the municipality with consideration to the different stages of development, types of buildings and their ownership over the long-term.

The following list provides a summary of the Green Standard CIP Incentive Programs which is followed by a more detailed description of each incentive. All programs are subject to approval of the requisite budgetary resources at the sole discretion of City Council. Once a program has approved funding, public notification will be provided to indicate incentive applications are being accepted along with any additional conditions or financial limitations.

Pre-construction (Land acquisition, development financing and building design):

- Feasibility study grants
 - Intended to support the Integrated Design Process used to determine cost-effective design characteristics required to construct high performance buildings
- Financing (low-interest loan from municipality)
 - Only applicable to the ICC involved in constructing to Net Zero energy or Net Zero ready building performance levels (A or B)
 - Completion of a feasibility study is required as part of process (grant applicable)
 - Applicable to developers intending to own the new building post-construction

Post - construction (upon building verification of performance level equivalency):

- Cash rebate grants
 - Intended to be a one-time grant for developers selling the building post-construction
 - May be used by faith-based places of worship and charitable organizations who are exempt from paying property taxes (other eligibility limitations apply as indicated in section 5.3)
 - Value of incentive will be at a lesser level than the Tax Increment Rebate (see below)
- Incremental Property Tax Rebate (similar to Brownfields CIP program)
 - Based on tax uplift between pre and post construction assessed property value
 - Intended for developers that retain ownership of building post-construction to recoup a larger portion of their ICC

- Increment rebated up to 10 years or until eligible incentive is paid out in full

As previously indicated in section 4.0, regardless of the building performance level or incentive program, Green Standard CIP applicants will be required to conduct, and provide to City staff, independent modelling by a qualified professional indicating the target building performance level prior to issuance of the building permit as well as verification upon commissioning of the building. For all incentive programs, the City will maintain a right to peer review any supporting documentation provided and to have all reasonable peer review costs covered by an applicant.

5.1 Feasibility Study Grants

Feasibility Study Grants are intended to support the use of an Integrated Design Process to determine cost-effective design characteristics required to construct high performance buildings. These studies are to be conducted at the early design stage, provide for upfront consideration of opportunities to maximize the performance of the building envelope, optimization of efficiency of the mechanical and ventilation systems as well as inclusion of renewable or alternative energy resources where feasible. This will enable building proponents to pro-actively evaluate the impacts of different building design elements on performance levels related to any applicable incentives as well as cost-effectively assess different alternatives to achieve the desired goal.

The outcome of the Feasibility Study must clearly provide a quantitative assessment of different building elements as they impact energy performance related to the Green Standard CIP performance levels (as described in Section 4.0) based on established engineering and building science practices/principles. The assessment should also clearly indicate a preferred bundle of building design elements and energy efficiency measures that will be included as the project advances to the building permit and construction stages of development including the targeted CIP building performance level and third-party building certification level if applicable.

The Feasibility Study Grants will provide up to 50% of the cost of completing the feasibility study up to maximum of \$25,000 per development project. Grant applicants must submit the completed feasibility study to the City for review, along with the invoice indicating the cost of the study, as well as the associated energy modelling indicating achievement of at

least Level C building performance levels as described in Section 4.0. The Feasibility Study Grants will be awarded to the property owner following the City's confirmation that grant application meets these requirements and upon issuance of the building permit for the project to be constructed to the targeted performance level.

These grants are not applicable to development projects that access other programs such as the Enbridge Gas Savings by Design Program or any other program that reimburses or provides upfront financial assistance for the full cost of a feasibility study or equivalent design charrette process. The CIP Feasibility Study Grants are available to eligible development projects that may access related programs which incentivize up to the remaining 50% of the costs associated in conducting an Integrated Design Process subject to the maximum CIP Grant value and the other requirements as outlined above.

A maximum dollar value for all Feasibility Study Grants provided within any one calendar year may be established by City Council at their sole discretion.

5.2 Financing

The City may offer eligible development projects low-interest financing for the ICC premium involved in constructing to Net Zero energy or Net Zero ready building performance levels. This refers to the Green Standard CIP building performance levels A and B. Municipalities have financing options that are often at lower interest rates than traditional sources of financing available to the development sector and therefore can help decrease the cost of capital required for constructing a high-performance building.

This financing will only be applicable to developers intending to own the new building post-construction. A charge, equal to the value of the loan, will be registered on title to the property until it is paid in full.

Maximum loan amounts will be determined upon City Council approval of annual budgets for the purposes of administering the Green Standard CIP. Applicable terms and interest rates will be determined at time of the proponent's application to the Green Standard CIP. Completion of a feasibility study will be a pre-requisite to applying for financing through the Green Standard CIP.

If the fully constructed building fails to reach the required building performance levels described above upon commissioning, a financial penalty and/or a shorter term of loan repayment may be enforced at the discretion of the City Treasurer or designate.

5.3 Cash Rebate Grants

Based on independent studies assessing the ICC for constructing high performance green buildings, it is estimated that the building performance levels identified within the Green Standard CIP may involve ICC premiums within the range of approximately 2% to 17% above the related current OBC energy efficiency standards depending on the performance level and benchmark standard referenced as well as the type of building constructed.

Cash Rebate Grants are intended to be a one-time grant, at a maximum of \$250,000 for any individual project, to help building proponents recover a portion of the ICC premium associated with reaching Green Standard performance levels A, B, or C, as listed below:

- Up to 35% of eligible ICC associated with achieving CIP Performance Level A*
- Up to 25% of eligible ICC associated with achieving CIP Performance Level B
- Up to 15% of eligible ICC associated with achieving CIP Performance Level C

*If the applicant uses the Zero Carbon Building (ZCB) standards for third party certification to qualify for this incentive program, Level A requires the ZCB v2 Design Standard certification to meet the TEUI target identified within Kingston's Green Standard CIP regardless of the TEDI option chosen for energy modelling allowed within the ZCB standard.

The Cash Rebate Grants are applicable to developers selling the new building post-construction as well as faith-based places of worship and charitable organizations who are exempt from paying property taxes

The proportion of the ICC, and the associated dollar value of this incentive, will be at a lesser amount than provided within the more long-term oriented Incremental Property Tax Rebate (see Section 5.4) as the property owner will be able to recover some or all the additional proportion of their investment in the sale of their high-performance building.

The property owners indicated above, who are exempt from paying property taxes, and therefore ineligible for the larger Incremental Property Tax Rebate, will be able to further recover a portion of their ICC investment during their ongoing ownership of the building through reduced operating expenses with the expected lower energy consumption and associated utility bills.

Provincial and federal owned properties and properties owned by their agencies are ineligible for Cash Rebate Grants.

The total number of Cash Rebate Grants and the maximum cumulative dollar value awarded to all eligible applicants within any one calendar year will be established as part of the municipal budget approved by Kingston City Council on an annual basis.

5.4 Incremental Property Tax Rebate

Property taxes are a primary source of revenue for a municipality. Properties which are vacant, undeveloped, or in need of remediation will yield less (if any) revenue to the municipality than developed and well-maintained properties. Developments that increase the residential or employment intensity of an area can also enhance property tax values and associated revenue for the municipality while serving a public good such as environmental protection and downtown revitalization as examples.

Offering temporary relief on property tax is a proven tool that the municipality can use to motivate and incentivize property owners to invest in improvements to their properties, thus increasing the value of the property and the associated tax revenue potential for the municipality. Many municipalities have successfully offered short-term relief programs waiving part or all the property tax on eligible properties, particularly the portion of the tax that is new due to actions which increase the value of the property which is sometimes referred to as tax uplift. These relief programs have been called Tax-Increment Grants or rebates because it applies only to the incremental increase in property taxes payable, not to the tax that was assessed prior to the improvement of the property. This helps ensure that the municipality continues to collect tax revenue from the property used for the funding of municipal services such as garbage collection and road maintenance, but also provides a meaningful incentive to the developer.

The intent of the Incremental Property Tax Rebate incentive program is to encourage investment in enhanced building performance as described within the Green Standard CIP. This rebate is targeted for developers that retain ownership of building post-construction during its operation to recover a larger portion of the ICC associated with building to CIP performance levels A, B or C. Upon building completion and payment of the first year's property taxes, the rebate would be paid annually to the property owner at the following incremental levels from 25% to 50% of the annual tax uplift on the property for up to 10 years (25% for multi-residential and office, 50% for retail buildings) or until the eligible ICC is partially recovered as indicated below to a maximum of \$1,000,000 for any individual development project:

- Up to 75% of eligible ICC associated with achieving CIP Performance Level A*
- Up to 55% of eligible ICC associated with achieving CIP Performance Level B
- Up to 35% of eligible ICC associated with achieving CIP Performance Level C

*If the applicant uses the ZCB standard for third party certification to qualify for this incentive program, Level A requires the ZCB v2 Design Standard certification to be met upon completion of the building and ZCB v2 Performance Standard certification to be achieved for each year the tax rebate is applicable.

The formula included below will be used to determine the rebate on any given project subject to any maximum limits established.

Total eligible amount for Tax Rebate = % of eligible ICC associated with the Green Standard CIP building performance achieved.

Total amount rebated annually = 25% - 50% of Total municipal portion of incremental property tax payable per year until Total eligible amount of Tax Rebate is recovered by the applicant.

Incremental property tax payable = Property value after construction – Property value before construction x tax rate

The final valuation of the Tax Rebate will be calculated after a site assessment has been conducted following the completion of the development and is incrementally determined

based on the level of building performance and any applicable third-party certification has been verified. Property taxes must be paid in full in any year for which the applicant will receive a rebate prior to the rebate being processed. When the cumulative approved incentive amount is reached, the tax rebate will immediately expire.

The following example illustrates how the Incremental Tax Rebate would be calculated. A property owner constructs a new NZe multi-residential building on a vacant property and is independently verified to have met the Green Standard CIP performance Level A. The increased assessment value of that property will be used when calculating the Incremental Property Tax Rebate amount as follows:

- the project will create a \$300,000 annual increase in municipal portion of property taxes payable thereby creating a maximum annual rebate of \$75,000 (at 25%)
- the property owner incurs \$800,000 in additional eligible costs to build to NZe enabling them to recover up to 75% of the eligible ICC back as a rebate ($75\% \times \$800,000 = \$600,000$).
- Upon project completion, and payment of first year's property taxes, the property owner receives \$75,000 as a rebate.
- The tax rebate for this project expires after eight years ($\$600,000$ divided by $\$75,000 = 8$).

Property owners who occupy the new building constructed to the Green Standard CIP performance levels, and benefit from their associated lower utility costs, will have post-construction incentives reduced by up to 50% depending on the portion of the utility savings that are passed on to other building tenants. For example, a property owner of a multi-unit residential building who maintains a relatively small management office may have no reduction in the rebate paid to them if their tenants pay their own utility bills. Whereas a property owner occupying a commercial office building where they pay the utilities for the entire building would have the total rebate value reduced by 50%. The percentage of occupied space utilized by the owner, as well as responsibility for utility costs as described above, will be factored into the determination of any reduction accordingly.

The maximum cumulative dollar value for all Incremental Property Tax Rebates awarded within any one calendar year will be established as part of the annual municipal budget approved by Kingston City Council.

For the purposes of this incentive program, the following development projects are not eligible for the Green Standard CIP Incremental Property Tax Rebate program:

- a) developments that do not increase the property taxes collected by the City;
- b) developments that will not achieve Green Standard CIP building performance levels A, B or C as outlined in section 4;
- c) development projects where the incremental tax uplift is already being rebated through another parallel program such as the City's Brownfield CIP; or,
- d) there are existing property tax arrears on the property.

If the City of Kingston's Brownfield CIP rebate is being utilized as part of a development project, the Cash Rebate Grant may be accessed as an alternative Green Standard incentive at the corresponding percentage recovery of the associated ICC if all other eligible requirements are met as described in section 5.3.

6.0 Program Administration

For the purposes of this CIP, the "applicant" to any of the associated incentive programs is defined as the owner of the property at the time of application. New construction projects are considered developments where a minimum area of 60% of the previous structure on site are removed or rebuilt. Renovation or restoration projects not meeting this minimum requirement are ineligible for the Green Standard CIP.

The Green Standard CIP incentive programs are proposed to be delivered by the City of Kingston's Climate Leadership Division in coordination with the Taxation and Revenue Division and the Building Services Division. These municipal divisions will work together to design and secure approval for a stream-lined process for management of the incentive program including:

- i. Application by eligible applicant, with detailed plans and all relevant documents for the development or rehabilitation proposal, including the level of Building Performance and, where applicable, Building Certification that is being pursued;

- ii. Review by the Building Services Division to ensure any OBC requirements are met and the Climate Leadership Division to ensure the incentive application is complete and the project is eligible, as well as to confirm which performance level of Green Building Standards are being pursued;
- iii. Approval of Application and determination of eligible incentive amount;
- iv. After the as-built building performance has been verified and any applicable certification has been earned, the applicant shall produce a building performance verification report and a copy of any certificate appropriate to the Green Building Standard used;
- v. Where TEUI, TEDI and GHG intensity calculations are used as the basis for the incentive approval, then the Applicant shall submit a Commissioning Report, signed by a duly qualified Commissioning Agent, including evidence that the building was constructed as modelled and is operating as intended.

And for the Incremental Property Tax Rebate:

- vi. Annual monitoring of the property after construction is completed to ensure that the property continues to meet the Green Standard CIP performance criteria for the tax rebate that is being provided. If standards are not being met, the tax rebate will be adjusted to the appropriate amount.
- vii. Monitoring of the amount of tax rebate provided for up to ten years to ensure that the program ends once the eligible ICC of the development have been offset.

The City will maintain a right to request peer review of documentation provided in support of an application, or portions thereof, and to recover reasonable peer review costs from the applicant subject to the prior approval of the applicant.

For all Green Standard CIP incentive programs, successful applicants will be required to enter into an agreement with the City subject to approval of City Council.

6.1 Eligible Costs

In terms of the ICC premium considered within the Green Standard CIP incentive programs, eligibility of development project costs will be determined within the modelled design of the proposed building by demonstrating the necessity to achieving the targeted

performance level in comparison to a reference case or compliance performance benchmark. This includes all necessary enhancements to heating, ventilation, air conditioning and hot water systems, and building envelope improvements above the OBC compliance requirements as well as incorporating renewable energy where applicable. This will typically be included as estimates within Feasibility Studies but for the purposes of administering the Green Standard CIP incentives, will be based on actual incurred costs with supporting documentation (e.g. itemized invoices).

For CIP applications using the Green Building Certification path, the property owner must submit verification of the level that was achieved in the form of a copy of a certificate from the adjudicating agency for the certification program. The municipality will accept the quality assurance processes behind these Green Building Certification programs as sufficient proof for the purposes of administering the Green Standard CIP incentive programs. The cost of obtaining the building certification, commissioning post-construction and any other tests or assessments required for verification of performance levels achieved are also considered as an eligible cost for the purposes of determining the ICC considered within the Green Standard CIP incentives with adequate documentation.

Provision of electric vehicle charging equipment of 7kW/charger or greater will also be considered as an eligible cost for Green Standard CIP incentives. Although on site EV charging will increase overall electricity consumption for the associated building, the CIP recognizes the carbon reduction value of reduced tailpipe emissions compared to fossil fuel powered vehicles. Therefore, EV charging loads can be deducted from the modelled building energy performance for the purposes of administering applications to Green Standard CIP incentives.

Eligible development costs may include upgrading the size of electric panels within the building or an additional electrical service entrance related to EV charging. This also applies in the case of fuel switching thermal energy requirements resulting in increased overall electricity demand or inclusion of solar photovoltaic (PV) arrays as well as directly related costs incurred by the developer/property owner for new or upgraded external distribution infrastructure when required. Eligible ICC can also include costs for enhanced roof load capacity/reinforcement when identified as a requirement above the corresponding OBC compliance within a quotation or proposal for a rooftop PV array from a qualified solar installer and professional engineer to accommodate for the added weight of the renewable energy system.

In pursuing NZ energy levels of performance, it is recognized that there can be site specific limitations to optimizing the role of solar PV in fulfilling on-site power needs for a building such as the rooftop size, shape or available space as well as shading from mature trees or other adjacent buildings. Subject to any provincial, utility or any other municipal approvals, permits, allowances or program requirements, ground mount carports or use of virtual net metering could be considered in these cases. For virtual net metering, when permissible in the province of Ontario, only the direct costs associated with procuring the associated renewable energy credits will be considered as eligible under the Green Standard CIP incentive programs.

Incentive programs related to the project's ICC will be calculated using the eligible cost premium which the developer invested into the project, above and beyond standard construction costs to meet the applicable building code, to achieve the building performance level and certification level presented. These incremental costs must be reported clearly and in an auditable form for review by municipal staff. Supporting materials may be required such as invoices from suppliers.

The eligibility date for costs incurred for a Feasibility Study Grant are upon City staff written acknowledgement of a complete and eligible grant application and must be prior to the date of the study commencement. Any eligible development projects seeking access to the Financing incentive must not have received a building permit prior to the date Kingston City Council formally approves the Green Standard CIP and approval of the requisite CIP budget in any given year.

For the Cash Rebate Grants and Property Tax Increment Rebates, the date the applicant may incur eligible costs that will be subsidized by the incentive will commence when the designated City staff have confirmed in writing (including email) the incentive application is deemed complete and satisfies the requirements as described within the Green Standard CIP. Award of such incentives will not be confirmed until all requirements are met for such incentives as described in sections 5.3 and 5.4.

6.2. Monitoring of Green Standard CIP Impact

City staff will track the following metrics to indicate the success of the program and to identify if program specifics need to be adjusted:

- number of property owners participating in each of the Green Standard CIP incentive programs;
- the number of new buildings and total interior area (square feet or square metres) meeting each performance level (Level A, B or C);
- estimated total energy and GHG emissions savings for participating buildings above the OBC requirements;
- dollars per tonne of GHG savings achieved overall and,
- increased municipal property tax revenue as a result of new buildings participating in the program.

Where applicable, other environmental benefits such as water savings along with avoiding municipal infrastructure growth and related impacts will be monitored. Update reports will be prepared by staff on annual basis to be reviewed by City Council.

City staff will also track the dollar value of any incentives awarded to ensure they stay within program and/or annual maximums established by City Council.

6.3 Incentive Program Duration

A Green Standard CIP incentive program will come into effect immediately after the requisite budget resources are approved by City Council and will remain active until the available municipal funding has been expired subject to any discontinued programs as outlined in section 3.5. Once the corresponding budget is exhausted, this program will remain valid as an endorsed program that is dormant until funding is renewed.