

Mandatory Building Performance Standard Model Bylaw

Background

Municipalities are increasingly turning to mandatory policies such as [Mandatory Building Performance Standards](#) (MBPS) to address the energy and carbon footprint of large existing buildings, enhance indoor air quality, protect and conserve water, reduce waste, and create local jobs.

MBPS are standards designed to reduce energy usage or greenhouse gas emissions from the worst-performing segment of the building stock at a given date or upon a triggering event (e.g., during major renovations). It outlines a path for buildings to meet our climate objectives by increasing the annual retrofit rates, providing practical support, and discouraging noncompliance through various enforcement mechanisms.

In Canada, the City of [Vancouver](#) is the only municipality that has adopted carbon pollution limits for commercial and retail buildings. [Toronto](#) and [Montreal](#) have also signaled plans to implement an energy and/or emissions-based MBPS in upcoming years based on current enabling precursor activities. Several municipalities have identified performance standards as a necessary policy tool to decarbonize their existing buildings in their Climate and Retrofit Plans.

To lessen the administrative burden on municipalities seeking to enact MBPS policies, a model bylaw is provided as a complement to the recent report "[Regulating energy and emissions in existing buildings: A primer for Canadian municipalities](#)".

Purpose of model bylaw

The model bylaw serves as a living template for local government and municipal staff considering the use of a Mandatory Building Performance Standard. The bylaw promotes consistency and resource efficiency by aligning key components of the MBPS policy with best practices from leading jurisdictions (e.g., [Vancouver](#), [State of Maryland](#), [New York City](#), [Washington State](#), and [Boston, Massachusetts](#)).

Scope of the model bylaw

The bylaw contains key design elements of a Building Performance Standards policy, including definitions, covered buildings and exemptions, compliance pathways, Building Performance Improvement Board, violations, and enforcement. It assumes the jurisdiction has a pre-existing mandatory benchmarking program and users have read the "[Regulating energy and emissions in existing buildings: A primer for Canadian municipalities](#)" report for additional details.

How to use this model bylaw

Jurisdictions should consider this bylaw as a starting point, and be prepared to customize the language, content, and format to meet their local needs and policy priorities. The template contains section headings with brief content descriptions and suggested text with blank spaces. The body text of the bylaw should be modified based on the prompts (e.g., [date]).

A bylaw to establish [purpose of the bylaw]

Bylaw # [XXX]

Section 1

Interpretation

Section 1 details the name of the bylaw, its purpose, and definitions of key terms used within the policy. The purpose of the bylaw explicitly lays out the climate and coequal equity goals of the BPS policy. The definition of key terminology usually aligns with pre-existing definitions from other building-related policies. A sample of key terms to be defined is provided and should not be considered exhaustive.

Name of bylaw

1.1 This bylaw shall be known and cited as the “[bylaw title]”.

Intent and Authority

1.2 This bylaw is printed under and by the authority of the [Council of the City of].

1.3 The intent of this bylaw is to:

- (a) Improve the performance of existing buildings by reducing greenhouse gas emissions from large [municipal, commercial, institutional, and/or multi-family] buildings while promoting equitable benefits for residents of [name of City]; [and]
- (b) Strengthen the local economy by encouraging more efficient business operations and providing new opportunities for local businesses that provide energy conservation and efficiency services.

Definition

1.4 As used in this bylaw, the following terms shall have the following meaning:

“Baseline performance” means the value of the performance metric in the baseline year(s) defined by the City;

“Benchmark” means tracking and inputting a building’s energy consumption data and other relevant building information on a monthly basis for at least 12 consecutive months, as required by the benchmarking tool, to quantify the building’s energy use and greenhouse gas emissions;

“Building” means any structure with a gross floor area equal to or larger than [floor area in square metres] enclosed by a roof and walls, intended to support or shelter any use or occupancy and consumes energy;

“Building owner” means an individual or legal entity, company, or syndicate of co-owners that possess title to a building; in the case of Crown-owned lands, owner shall mean the occupier;

“City” means the [City of];

“Commercial building” means a building that is subject to commercial provisions, regardless of the nature of the entity or government that owns the building;

“Covered building” means a building that is commercial or multifamily residential in the [City of] or owned by the [City of] with a gross floor area of [square metres] or more, excluding the parking area;

“Existing buildings” means buildings lawfully constructed and completed under a building permit, if a building permit was required;

“Final performance standard or final standard” means the numeric values of net direct greenhouse gas emissions OR site energy use intensity that each covered building must ultimately achieve on an annual basis in [final year] and beyond;

“Greenhouse gas (GHG) emissions” means carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) gases emitted as a result of energy consumption in a building,

including direct emissions from on-site fuel combustion and indirect emissions from the consumption of electricity, steam, hot water or chilled water from a distribution system; GHG emissions are expressed in carbon dioxide equivalent (CO_{2e});

“Gross floor area (GFA)” means the sum of the area of every floor in a building, measured between the outside surface of the exterior walls, including all areas inside a building, excluding exterior spaces such as balconies, patios, interior parking spaces, and covered walkways, and crawl spaces;

“Interim performance standard or interim standard” means the numeric values of net direct greenhouse gas emissions OR site energy use intensity which covered buildings must achieve by a specified calendar year that is prior to the final performance standard.

Section 2

Applicability

Section 2 details which buildings will be included and excluded under the policy. It is important for authorities to clarify the types and sizes of buildings and if they will be phased in, along with the timeline for doing so. Jurisdictions can specify whether this policy will apply to new and/or existing buildings. This section presents the covered buildings in both bullet points and a table format for easier comprehension.

Covered Building Types

2.1 This bylaw applies to the following buildings (Table 1):

- (a) No later than [date], any [municipal, commercial, institutional, and/or multi-family buildings] with a floor area of [square metres] or more within the City of [name of City] and any building containing [number of dwellings] or more dwellings.

- (b) No later than [date], any [municipal, commercial, institutional, and/or multi-family buildings] with a floor area of [square metres] or more within the City of [name of City] and any building containing [number of dwellings] or more dwellings.
- (c) No later than [date], any [municipal, commercial, institutional, and/or multi-family buildings] with a floor area of [square metres] or more within the City of [name of City] and any building containing [number of dwellings] or more dwellings.

Table 1. Buildings subject to the Regulation

<i>Coming into effect of application</i>	<i>Buildings subject to the bylaw</i>
[DATE]	<p><i>Any municipal, commercial, institutional, and/or multi-family building having a floor area of [square metres].</i></p> <p><i>Any building containing [number of dwellings] or more dwellings.</i></p>
[DATE]	<p><i>Any municipal, commercial, institutional, and/or multi-family building having a floor area of [square metres].</i></p> <p><i>Any building containing [number of dwellings] or more dwellings.</i></p>
[DATE]	<p><i>Any municipal, commercial, institutional, and/or multi-family building having a floor area of [square metres].</i></p> <p><i>Any building containing [number of dwellings] or more dwellings.</i></p>

Exemptions

2.2A building owner can apply for an exemption from the requirements of this bylaw for [X] calendar year(s) by providing documentation demonstrating the following:

- (a) The property is listed as a heritage building or is eligible for this designation;
- (b) The building did not have a certificate of occupancy or temporary certificate of occupancy for a consecutive twelve-month period within [X] years prior to the compliance date;
- (c) The covered building was not occupied by the owner or tenant for at least [percent] of the conditioned floor area throughout the consecutive twelve-month period prior to the building compliance date due to renovation;
- (d) The sum of the building's gross floor area minus unconditioned and semi-conditioned spaces is less than [square metres];
- (e) The property is primarily used for manufacturing or other industrial purposes with intensive use of process energy;
- (f) Financial distress:
- The building has arrears of property taxes resulting in the building's inclusion on the City's annual tax lien sale list;
 - The building has a court-appointed receiver in control of the asset due to financial distress;
 - The building is owned by a financial institution through default by the borrower;
 - The building has been acquired by a deed in lieu of foreclosure within the previous [X] months;
 - The building owner has an immediate and significant financial need that cannot be satisfied from other available resources and is caused by events that are beyond the building owner's control. In addition, strict compliance would not be in the public's best interest.

- (g) The covered building was demolished during the calendar year for which benchmarking is required.

2.3 Building owners must submit an application for exemption to the Building Performance Improvement Board at least [X] days prior to the compliance date to receive exemption approval. After the documents have been reviewed, the Board will provide written notification of approval or denial. If the application is denied, the building owner must proceed with the required actions to demonstrate compliance with the performance standards.

Section 3

Standards and compliance

Section 3 outlines the performance requirements and pathways available for building owners to comply. Jurisdictions have the option to use fixed or recalculated interim performance targets. In the former case, a list of interim targets for each building type and window must be provided.

Fixed Performance Targets

3.1 Except otherwise provided by rule, on and after [date], a covered building shall not have annual performance standards higher than the annual performance limit for such building type as determined in Table 2.

- (a) Each covered building must be at or below the interim performance standard of [value and metric such as normalized site EUI or onsite greenhouse gas emissions] for [20XX-20XX] in each calendar year including [20XX, 20XX, 20XX, 20XX, and 20XX].
- (b) Each covered building must be at or below the interim performance standard of [value and metric such as normalized site EUI or onsite greenhouse gas

[emissions] for [20XX-20XX] in each calendar year including [20XX, 20XX, 20XX, 20XX, and 20XX].

(c) Each covered building must be at or below the final performance standard of [value and metric such as normalized site EUI or onsite greenhouse gas emissions] in calendar year [20XX] and each calendar year thereafter.

3.2 New buildings constructed before [year] are expected to comply with the final standard performance level on and after [date].

3.3 Qualified buildings such as [buildings receiving accommodation such as affordable buildings and houses of worship] shall comply with an extended compliance cycle of [X] years. The compliance cycle shall begin on [date] and end [X] years after.

3.4 Covered buildings must demonstrate compliance with the performance standards by reporting building energy benchmarking data to the [city or specific department] using the benchmarking tool. The [city or specific department] must determine compliance by comparing the performance metric against the interim or final performance standards for the applicable building type.

Table 2. Interim and final performance standards by building type

Property Type	Interim Targets			Final Target
	20XX-20XX	20XX-20XX	20XX-20XX	20XX and beyond

Recalculated Performance Targets

3.5 The [city or specific department] must develop and implement building energy performance standards for covered buildings. The following standards shall apply to the property types outlined in Applicability Section:

- (a) No later than [date], the [city or specific department] will establish the final performance standard for each building type using [metric such as normalized site EUI or onsite greenhouse gas emissions] performance metric. The [city or specific department] shall ensure the final performance standards will result in [percent] reduction in [metric such as normalized site EUI or onsite greenhouse gas emissions] from the baseline.
- (b) The interim performance standards shall be calculated for each covered building type with the starting point set at the covered building's performance baseline and continuing to the final performance standard. The interim targets will be revised no later than every [X] years.
- (c) The performance baseline for each covered building shall be calculated as follows: average of the [X] complete years with the highest [metric such as normalized site EUI or onsite greenhouse gas emissions] between calendar year [X] and [X].

3.6 New buildings constructed before [year] are expected to comply with the final standard performance level on and after [date].

3.7 Qualified buildings such as [buildings receiving accommodation such as affordable buildings and houses of worship] shall comply with an extended compliance cycle of [X] years. The compliance cycle shall begin on [date] and end [X] years after that day.

3.8 Covered buildings must demonstrate compliance with the performance standards by reporting building energy benchmarking data to the [city or specific department] using the benchmarking tool, [e.g., ENERGY STAR Portfolio Manager]. The [city or specific department] must determine compliance by comparing the performance metric against the interim or final performance standards for the applicable building type.

Alternative Compliance Pathways

3.9 For buildings performing below the performance standard or if due to unusual circumstances, the building owners believe they will be unable to meet the performance standards by the deadline, buildings can come into compliance by paying an alternative compliance fee for every [metric tonne of CO_{2e} or GJ of energy] in excess of the performance standard. The fee shall be:

- [\$X] per [metric tonne of CO_{2e} or GJ of energy] of excess of the performance standard in [20XX] dollars, adjusted for inflation, for [20XX].
- The fee rate will increase by [\$X] per each calendar year in [20XX] dollars, adjusted for inflation.

3.10 Building owners such as buildings with newer equipment (less than [X] years) may present a custom alternative compliance plan for consideration and approval by the Building Performance Improvement Board no later than [X] days before the deadline for submitting documentation of compliance with interim or final performance standards.

- (a) A custom alternative compliance plan should include [e.g., documentation of economic infeasibility or other circumstances beyond the owner's control such that interim or final performance standards are not met; a list of potential improvement measures; a plan and timeline for achieving energy improvements to the building's performance that will provide cost-effective energy savings based on guidelines established by regulation; and procedures for correcting any noncompliance or deviation from the plan].
- (b) Once the Building Performance Improvement Board approves the plan, the application becomes a binding agreement between the [city] and the owner.
- (c) If the plan is denied, building owners have the right to a one-time appeal of the Building Performance Improvement Board determination of ineligibility.

Section 4

Building performance improvement board

Section 4 outlines the composition and responsibilities of the Building Performance Improvement Board. Additional details, such as how to communicate with building owners and interact with the Technical Advisory Committee, may be included.

Board Composition and Roles

- 4.1 No later than [date], the [city or specific department] shall establish the Building Performance Improvement Board. The Board will consist of [X] members of the [City of] appointed by the [Mayor or Council]. These individuals will comprise representatives of the building division, commercial and multifamily building owners, affordable housing owners and tenants, local utilities, labor, facility operations, engineering professionals, and environmental non-profits.
- 4.2 The Board shall carry out the following responsibilities:
- (a) Provide advice on the development and implementation of the bylaw.
 - (b) Recommend complementary programs or policies.
 - (c) Review appeals for exemptions and Alternative Compliance Plans submitted by building owners and make recommendations for approval or denial by the [city or specific department].
 - (d) Establish a Technical Advisory Committee composed of technical experts in areas related to performance metrics, technology development, building retrofit, and operational practices.

Term of Office

4.3 Except for the first term appointment which shall be staggered, all appointments shall be for a term of [X] years. Members whose appointed terms have expired shall be permitted to continue to serve until reappointed or replaced. Members shall dedicate approximately hours per year to committee business, including preparing and attending the meetings.

Compensation

4.4. The Building Energy Improvement Board and Technical Advisory Committee members shall be compensated [\$X] on a per-meeting basis, provided the individual is not compensated by another organization, company, or employer.

Section 5

Violations and enforcement

Section 5 identifies the consequences of violating the bylaw and the system for payment of penalties by building owners. Additionally, jurisdictions may outline the options for owners who want to dispute the rulings.

Offences

5.1 The [city or specific department] is authorized to impose administrative penalties upon building owners who are guilty of the following offences:

- (a) violate any of the provisions of this bylaw;
- (b) suffer or permit any act or thing to be done in contravention or in violation of any of the provisions of this bylaw;

- (c) neglect to do or refrain from doing anything required to be done by any of the provisions of this bylaw; or
- (d) fail to comply with an order or notice given under this bylaw.

5.2 Building owners who contravene the bylaw are subject to the following enforcement measures:

- (a) A Notice of Failure to Comply will be issued to Building owners, specifying the provisions violated and the length of time the owner has to bring the building back into compliance. This letter will be effective on the date of issuance and will be mailed to the owner’s last known address.
- (b) If sufficient documentation is not submitted by the date specified, the [city or specific department] will issue a Notice of Violation including the administrative penalties to be levied (Table 3). The [city or specific department] will consider the owner’s good faith efforts to meet the bylaw’s requirements, history of compliance, and whether non-compliance was related to unexpected, unforeseeable events outside of the control of the building owner when determining the value of the fine. The [city or specific department] may increase the penalty rates to adjust for the effects of inflation.

Table 3. Maximum Fine Amounts as a function of the building’s floor area

Building floor area (square metres)	Maximum Fine Amounts
[XXX- XXX]	Up to [\$X]

- (c) Fines shall be due and payable [X] business days after the date of issuance of the Notice of Violation. Failure to remit payments by the due date will result in an additional penalty of [\$X] per square metres of the gross floor area per year, up to a maximum of [\$X]. Payments can be made through the [website].

(d) All payments collected will be deposited into the [name] account which will be used to [purpose of funds].

Section 6

Enactment

Severability

6.1 A decision by a court that any part of this bylaw is illegal, void, or unenforceable severs that part from this bylaw, and is not to affect the balance of this bylaw.

Force and effect

6.2. This bylaw is to come into force and take effect on [date].