

REFERRAL REPORT

Report Date: May 21, 2025 Contact: Brad Badelt Contact No.: 604.673.8165

RTS No.: 17884 VanRIMS No.: 08-2000-20 Meeting Date: June 3, 2025

TO: Vancouver City Council

FROM: General Manager of Planning, Urban Design and Sustainability

SUBJECT: Planning Incentives for High Performance Buildings in the Zoning

and Development By-law

RECOMMENDATION TO REFER

THAT the General Manager of Planning, Urban Design and Sustainability be instructed to bring forward the application as described below, and that the application be referred to Public Hearing together with the recommendations set out below;

FURTHER THAT the Director of Legal Services be instructed to prepare the necessary Zoning and Development By-law amendments, generally in accordance with the recommendations set out below, for consideration at the Public Hearing.

RECOMMENDATION FOR PUBLIC HEARING

A. THAT Council approve, in principle, the application to amend the Zoning and Development By-law to update and extend the existing incentives for high performance buildings generally as presented in Appendix A;

FURTHER THAT the Director of Legal Services be instructed to bring forward for enactment amendments to the Zoning and Development By-law, generally as presented in Appendix A.

B. THAT subject to approval of recommendation A, Council approve, in principle, the application to amend the Vancouver Development Cost Levy By-law and the Vancouver Utilities Development Cost Levy By-law to include a consequential amendment generally as presented in Appendices B and C;

FURTHER THAT the Director of Legal Services be instructed to bring forward for enactment amendments to the Vancouver Development Cost Levy By-law and

the Vancouver Utilities Development Cost Levy By-law, generally as presented in Appendix B and C.

C. THAT the General Manager of Planning, Urban Design and Sustainability be instructed to develop embodied carbon limits for use with the incentive in the Zoning and Development By-law for smaller high-performance buildings, in consultation with industry, for implementation in 2026.

Report Summary

This report proposes updates to the existing voluntary incentives for high performance buildings in sections 10.19 and 10.33.1(e) of the Zoning and Development By-law to:

- Extend their duration to 2030 to reflect the City's climate targets and continue supporting high-performance builders that are working to reduce energy consumption and carbon emissions,
- Replace the current incentive for larger buildings with one that is more effective, simplified, and compatible with the 2026 requirements of transit-oriented areas, and
- Set embodied carbon limits for the voluntary incentive in the Zoning and Development By-law for smaller buildings to reduce the embodied emissions associated with building materials and designs, including through re-use and salvage.

The existing and proposed incentives for green buildings are voluntary and do not apply to most of the development or building applications received.

Council Authority / Previous Decisions

In July 2016, Council approved the Zero Emissions Building Plan, which laid out four strategies that aim to ensure new buildings in Vancouver will have no operational greenhouse gas emissions by 2030. The third of these strategies focuses on tools to catalyse private builders and developers to demonstrate effective approaches to zero-emission new buildings.

In May 2018 and January 2020, Council approved amendments to the Zoning and Development By-law to create incentives for large and small high-performance buildings lasting until December 31, 2025.

In November 2020, Council approved the Embodied Carbon Strategy as a part of the Climate Emergency Action Plan. This strategy aims to achieve a 40% reduction in embodied carbon from construction by 2030. Council directed staff to seek to implement the Embodied Carbon Strategy, including the development of additional incentives, and support for the expansion of industry capacity for low-carbon construction.

City Manager's Comments

The City Manager recommends approval of the foregoing.

Context and Background

Zero Emissions Building Plan

In July 2016, Council approved the Zero Emissions Building Plan (the "Plan"), which laid out four strategies that aim to ensure new buildings in Vancouver will have no operational greenhouse gas ("GHG") emissions by 2030:

- 1. Limits: establish GHG and thermal energy limits by building type and step these down over time to zero;
- 2. Leadership: require City- owned and City managed building projects to demonstrate zero emission building approaches where viable;
- 3. Catalyse: develop tools to catalyse leading private builders and developers to demonstrate effective approaches to zero emission new buildings; and
- 4. Capacity Building: establish a Centre of Zero Emission Building Excellence to facilitate the removal of barriers, the sharing of knowledge, and the development of the skills required to successfully achieve this goal.

The third strategy focuses on the development of tools to catalyse leading private builders and developers to demonstrate effective approaches to zero-emission new buildings. The Plan was developed through industry engagement and ultimately led to the creation of the province-wide Energy Step Code and Zero Carbon Step Code which have been widely adopted by cities across B.C.

Strategic Analysis

Incentive for Larger Green Buildings (Section 10.19 of the Zoning & Development By-law)

In 2018, the first green building incentive was approved to support multi-unit residential buildings designed to the Passive House standard, an internationally recognized approach that requires a highly efficient, insulated building envelope. Section 10.19 provides a 5% increase in permitted density for buildings with six or more dwelling units. These buildings in turn have supported the outcomes noted in the Zero Emissions Building Plan by demonstrating effective approaches to zero emission buildings and helping local builders, developers, product manufacturers, designers and trades people to reduce the cost of energy efficient construction.

Over the last seven years, approximately 14 development permit applications were made for eligible projects, of which seven have proceeded to the building permit stage. For comparison, there were 230 building permits in the same period, area and scale, meaning Passive House comprised 3% of the total volume. A survey of market participants indicates that the majority regard the current increase of 5% to be insufficient to drive the adoption of the Passive House standard in new buildings. This incentive is due to expire at the end of 2025.

Feedback from industry participants indicates that in most scenarios the current 5% bonus density is not financially viable on a pro forma basis for most Passive House projects. In terms of the permit process, applications for larger buildings typically calculate several different exclusions for green building features like additional insulation in addition to the density increase, which adds complexity to the permit process for staff and applicants. Replacing the existing density bonus with a combined floor space exclusion, like the one successfully used for smaller green buildings, would address several issues:

- Simplify use of the incentive by reducing the number of calculations
- Reduce the number of items in the Zoning & Development By-law
- Consolidate the format and location of both incentives
- Make the incentive for larger buildings easier to find and apply

Deciding on the extension in the first half of 2025 will allow the developers of large buildings more lead time to make investment decisions for projects in 2026.

Staff therefore recommend increasing the incentive amount for larger green buildings to 10%, simplifying the development process and aligning with the new requirements for transit-oriented legislation by incorporating existing floor space exclusions into a single exclusion from floor area, and extending the expiry date to align with the climate target date of 2030.

The City, in partnership with the Zero Emissions Innovation Centre, will continue to share the learnings of the leading builders and designers accessing this incentive through tours, case studies and other forms of outreach, as a way to support the transition of the building industry towards low-emissions buildings.

Incentive for Smaller Green Buildings (Section 10.33.1(e) of the Zoning & Development By-law)

Since its introduction in 2020, a floor space exclusion of 19% for residential buildings with up to eight dwelling units has provided a substantial incentive for new and renovated buildings designed to the Passive House standard. These standards have helped demonstrate significant reductions in the energy required to heat and cool buildings, thereby reducing operational emissions and normalizing practices to reduce costs. With the inclusion of the Canadian Home Builders Association's Net Zero standard in a subsequent update, buildings using this incentive have also shown the effectiveness of roof-mounted solar photovoltaic panels in reducing the annual electricity required for Vancouver houses.

Feedback from builders indicate the amount of the incentive has been key to motivating owners to pursue these high-performance standards. In addition to the incentive amount, the format of the incentive has simplified the permit application and review process for customers and staff by combining several separately available floor space exclusions into a single by-law sentence. This approach reduces the number of calculations needed and increases the clarity of outcome. Similarly to the incentive for larger green buildings, the 19% exclusion is due to expire at the end of January, 2026.

The incentive has successfully reduced operating emissions from smaller buildings. As operational emissions have fallen over time, however, the carbon emissions associated with the manufacture of building components themselves has risen to a greater share of the total emissions from buildings over their lifetime. Buildings designed to the Passive House and Net Zero standards are no exception, and these standards do not address embodied carbon. There are also no limits to embodied carbon for small buildings in the Vancouver Building By-law.

Local builders have started tackling this challenge through the Near Zero Stream 2 program underway at the Zero Emissions Innovation Centre. Early results are showing significantly lower embodied carbon in new buildings through limited design adjustments and readily available building products. Developing an embodied carbon limit for projects accessing incentives in the Zoning & Development By-law, in consultation with industry participants, will allow advanced

builders to demonstrate successful and feasible approaches to reducing embodied carbon more widely.

Staff therefore recommend establishing embodied carbon limits for smaller green buildings seeking the incentive starting in 2026 and extending the expiry date of the incentive to align with the City's embodied carbon strategy target of 2030.

As with the incentive for larger buildings, the City will work with the Zero Emissions Innovation Centre to share the learnings of leading builders and designers accessing this incentive as a way to support the transition of the building industry towards low-emissions homes.

Financial Implications

Implementation of the proposed amendments to the Zoning & Development By-law (Recommendation A) does not require additional funding or staff resources. Participation in these incentive programs will remain voluntary for developers.

The proposed amendments to the Vancouver DCL By-law and the Vancouver Utilities DCL By-law (Recommendation B) are anticipated to be revenue neutral to the City.

Legal

If the Recommendations in this report are adopted by Council, the City will revise these incentives for high performance buildings, and enact amendments to the Zoning and Development By-law, the Vancouver Development Cost Levy By-law and the Vancouver Utilities Development Cost Levy By-law.

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APPENDIX A

DRAFT By-law to amend the Zoning and Development By-law No. 3575 regarding zero emission buildings and other miscellaneous amendments

Note: An amending by-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

- 1. This by-law amends the indicated provisions of the Zoning and Development By-law No. 3575.
- 2. In section 2, Council strikes out the definition of "Low Operational Cost Housing".
- 3. In section 5.2.1(e), Council:
 - a. strikes out "low operational cost housing containing 6 or more dwelling units that is" and replaces it with "zero emission buildings that are";
 - b. strikes out "and may only be granted after the Director of Planning has considered" and substitutes "and may only vary any other provisions after considering"; and
 - c. strikes out "December 31, 2025" and substitutes "October 31, 2030".
- 4. In section 10, Council strikes out section 10.19 in its entirety, including the title and section 10.19.1, and substitutes the following: "Section 10.19 [Reserved]".
- 5. In section 10.33.1(e), Council:
 - a. adds "in an application for one or two principal dwelling units," before "the computation of floor area";
 - b. strikes out subsection (ii) and renumbers subsection (iii) as subsection (ii);
 - c. in subsection (ii), strikes out "January 31, 2026" and substitutes "October 31, 2030"; and
 - d. in subsection 10.33.1(e)(i), adds "or" after "10.33.3,".
- 6. In section 10.33, Council adds a new section 10.33.4 in the correct numerical order as follows.
 - "10.33.4 For a zero emission building not included in section 10.33.1, the Director of Planning may exclude 10% of the permitted floor area from the computation of the total floor area, if the Director of Planning considers the intent of the applicable district schedule and all applicable Council policies and guidelines, except that this exclusion does not apply if:
 - a) the site is zoned CD-1; or

- b) an exclusion is provided under section 10.15 or 10.33.3; or
- c) the application is made after October 31, 2030.".
- 7. A decision by a court that any part of this by-law is illegal, void, or unenforceable severs that part from this by-law, and is not to affect the balance of this by-law.
- 8. This by-law is to come into force and take effect on January 1, 2026.

 ENACTED by Council this day of , 2025

 Mayor

City Clerk

APPENDIX B

DRAFT By-law to amend the Vancouver Development Cost Levy By-law No. 9755 regarding Low Operational Cost Housing

- 1. This by-law amends the indicated provisions of the Vancouver Development Cost Levy By-law No. 9755.
- 2. In section 3, Council strikes out section 3.11, "Rate for LOCH increases".
- 3. A decision by a court that any part of this by-law is illegal, void, or unenforceable severs that part from this by-law, and is not to affect the balance of this by-law.
- 4. This by-law is to come into force and take effect on January 1, 2026.

	, 2025	day of	ENACTED by Council this
Mayor			
City Clerk			

APPENDIX C

DRAFT By-law to amend the Vancouver Utilities Development Cost Levy By-law No. 12183 regarding Low Operational Cost Housing

- 1. This by-law amends the indicated provisions of the Vancouver Utilities Development Cost Levy By-law No. 12183.
- 2. In section 3, Council strikes out section 3.12, "Rate for LOCH increases".
- 3. A decision by a court that any part of this by-law is illegal, void, or unenforceable severs that part from this by-law, and is not to affect the balance of this by-law.
- 4. This by-law is to come into force and take effect on January 1, 2026.

	, 2025	day of	ENACTED by Council this
Mayor			
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City Clerk			