



Updates from Sustainability Team

Fall 2022 Certified Professional Update Seminar -
Nov 3, 2022

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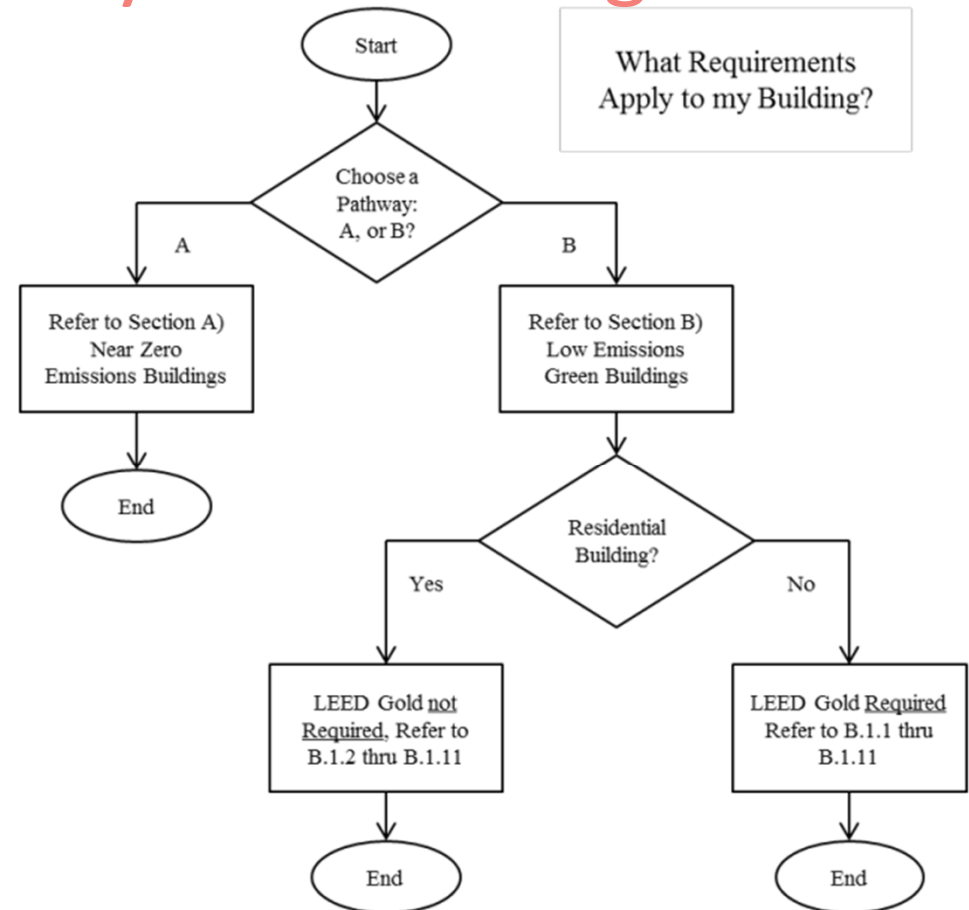
Agenda

1. Formalized process for compliance to 2017 Green Buildings Policy for Rezoning
2. Reminder: Airtightness testing requirement in VBBL
3. Approved Green Building Changes to Policy and VBBL for Part 3 New Construction
4. Regulations for Existing Commercial & Multi-family Buildings

1) Formalized process for compliance to 2017
Green Buildings Policy for Rezoning


2017 Green Buildings Policy for Rezonings

- Effective May 2017 until May 2022
- 2 compliance paths
- Projects now reaching BP/OC
- Formalized process and supports for Part 3 Buildings



Formalized process

- New Green Buildings Policy for Rezoning Checklist
- Identifies submittals at each stage to submit (via POSSE)
- Checklist for rezoning requirements can be filled out by architect, owners, or green building consultant

 Green Building Policy for Rezoning Checklist	
<p>This checklist provides clarification of submittal requirements for Part 3 buildings following a rezoning approved after May 1, 2017.</p> <p><i>This checklist should be submitted with the Building or Occupancy Permit application, or emailed to relevant City staff as part of Post-Occupancy reporting (see Notes). For enquiries related to this checklist, email green.buildings@vancouver.ca.</i></p> <p><i>Please complete all fields that apply to the project, using available information that represents the current stage of the project. For fields that do not apply or for which there is no information yet, please enter "N/A".</i></p>	
<p align="center">Project Information (enter all that apply)</p> <p>Project Address _____ Building Name _____ Rezoning Application Number _____ Development Permit Number _____ Building Permit Number _____ Occupancy Permit Number _____</p>	
<p>To use this Checklist: 1) Select the current permit stage. 2) Confirm whether the project is following a rezoning. 3) Select the applicable version of the Green Buildings Policy for Rezonings and compliance pathway (if any). The required submittal documents will be highlighted in yellow cells. Check that the required document is included in the submission. 4) If the required submittal is not included, provide an explanation in Section 4. 5) Complete the Contact Information section. This checklist may be completed by the project architect, owner or owner's representative, or sustainability consultant.</p>	
<p>1) Select Current Permit Stage</p>	<p align="center">Building Permit</p>
<p>2) Does the project follow a rezoning?</p>	<p><input checked="" type="checkbox"/> Yes <i>If Yes, select the applicable rezoning compliance pathway in Section 3 and complete sections 4 and 5.</i></p> <p><input type="checkbox"/> No <i>If No, complete Section 6 and submit this checklist with Building Permit or Occupancy Permit application.</i></p>
<p>3) Select the applicable version or compliance pathway of the Green Buildings Policy for Rezonings <i>To confirm the applicable version of Green Buildings Policy for Rezonings, refer to the project's rezoning referral report under the section "Conditions of Approval of Form of Development - Sustainability".</i></p>	
<p><input type="checkbox"/> Applicable</p>	<p>Path A Near Zero Emissions Buildings: 2017 Green Buildings Policy for Rezonings <i>(applies to rezoning applications from May 1 2017 to May 1 2018) (See Reference 1)</i></p>
<p>Required Submittals at Building Permit Application - Full Construction Stage</p>	
<input type="checkbox"/> Submitted	PHPP model & PH design summary report
<input type="checkbox"/> Submitted	Design Stage Assurance Letter from PH Certifier
<input type="checkbox"/> Submitted	PH Commissioning & Airtightness Plan
<p>Required Submittals at Occupancy Permit Application - Full Occupancy Stage</p>	
<input type="checkbox"/> Submitted	Final Letter from PH Certifier
<input type="checkbox"/> Submitted	Letter from a Registered Professional
<p>Required Submittals at Post-Occupancy</p>	
<input type="checkbox"/> Submitted	Copy of certification from Passive House Institute (See Note 1)
<p><input checked="" type="checkbox"/> Applicable</p>	<p>Path A Near Zero Emissions Buildings: 2018 Green Buildings Policy for Rezonings <i>(applies to rezoning applications from May 1 2018 to May 17 2022) (See Reference 2)</i></p>
<p>Required Submittals at Building Permit Application - Full Construction Stage</p>	
<input type="checkbox"/> Submitted	PHPP model & PH design summary report
<input type="checkbox"/> Submitted	Design Stage Assurance Letter from PH Certifier
<input type="checkbox"/> Submitted	PH Commissioning & Airtightness Plan

Formalized process

- Submit BP requirements at full construction stage permit application
- Submit OC requirements at final occupancy
 - Unless staged occupancy: identify which stage to submit documents
- Include this checklist for all Part 3 new construction BP and OC applications as of January 1 2023
- CP submissions lists will be updated

2) Reminder: Airtightness requirements for Part
3 buildings

Reminder: Airtightness requirements



- Air leakage testing for Part 3 buildings
 - In Rezoning since 2017
 - In VBBL since June 1, 2019
- Whole-building air leakage testing completed prior to occupancy
 - Residential buildings have suite testing requirements
- Testing report submitted to City as part of occupancy
- Guidance document coming soon

3) Approved Green Building Changes for Part 3 New Construction

Approved Green Building Changes for Part 3 New Construction

Changes approved on [May 17 2022](#)

- Green Building Policy for Rezoning (effective May 18 2022)
- Vancouver Building By-law (effective July 2023 and January 2025).

Approved Changes



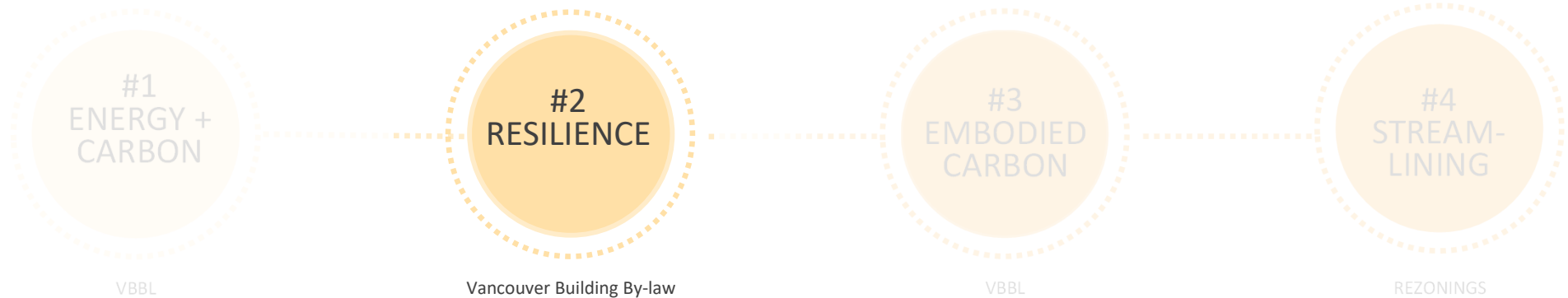
Effective July 2023

- 4-6 story residential occupancies: GHGI = 3
- For industrial/care/assembly (Group A, B, F major occupancies): 50% lower than the GHGI of the reference building modelled using only fossil-fuel systems

Effective Jan 2025

- 7+ storey residential occupancies: GHGI = 3
- Hotel & motel occupancies: GHGI = 4
- Include refrigerant impact (GHGI-R) in calculation of whole building GHGI limit
- For industrial/care/assembly (Group A, B, F major occupancies): 85% lower than the GHGI of the reference building modelled using only fossil-fuel systems

Approved Changes



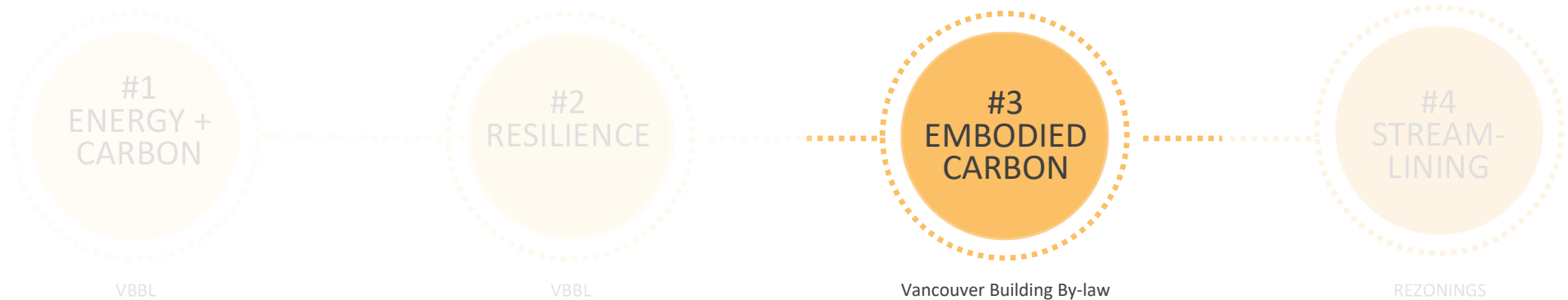
Effective July 2023

- MERV 13 filtration is required prior to introduction of outdoor air into indoor occupied spaces

Effective Jan 2025

- All dwelling units within new Part 3 buildings must be served by active mechanical cooling capable of maintaining an indoor air temperature of 26°C, with windows closed.

Approved Changes



Effective July 2023

- Report whole-building embodied carbon impacts that must not be more than double that of a functionally equivalent baseline (created based on new COV Embodied Carbon Guidelines)

Effective Jan 2025

- 1-6 storey buildings that can be built with wood or mass timber: 20% embodied carbon reductions compared to baseline
- All other buildings: 10% embodied carbon reductions
- All new Part 3 buildings: meet one responsible source materials category, **OR** double the minimum embodied carbon reductions noted above

Approved Changes

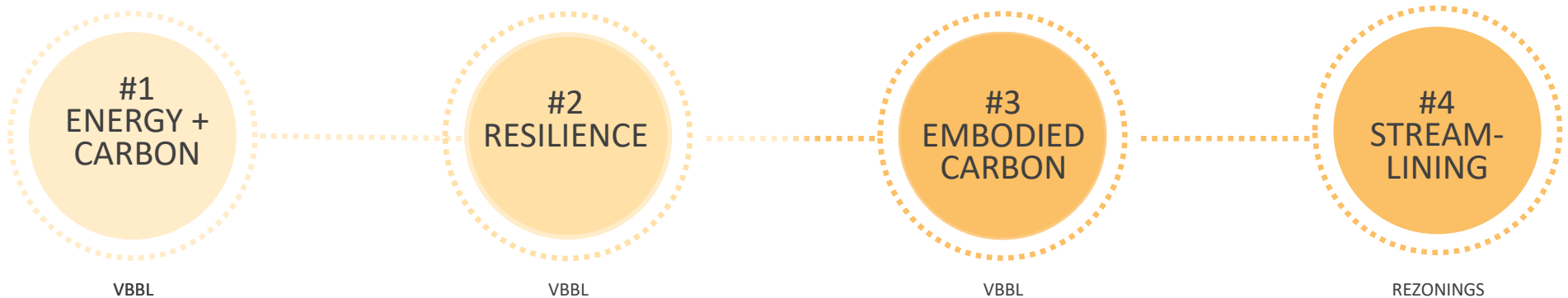


Effective May 18, 2022

Streamlined Process: submissions at rezoning application stage only*

*refer to [Green Buildings Policy for Rezoning – Process and Requirements](#)

Implementation supports in progress



UPDATED Energy & Emissions Design Report

NEW Embodied Carbon Guidelines
NEW Embodied Carbon Design Report

NEW Green Buildings Policy for Rezoning Checklist

4) Regulations for existing commercial + multi-family buildings

large commercial + multi-family



Detached homes
+ duplexes

78,800 homes

28% of total GHG's



Multi-Family
Residential*

6,115 buildings

24% of total GHG's

*incl. rental, non-market,
condos



Commercial

3,420 buildings

26% of total GHG's



Industrial

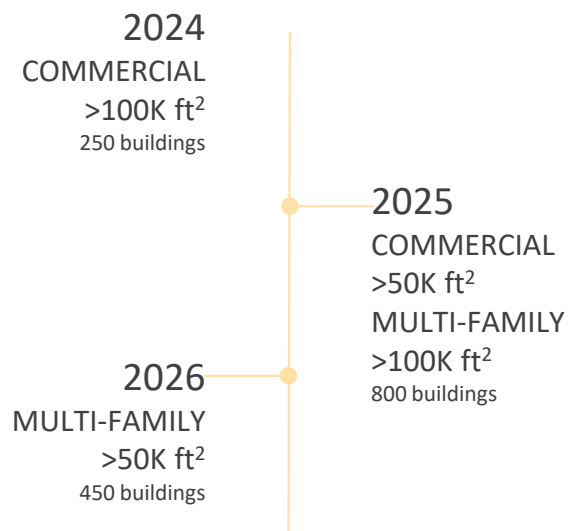
1,081 buildings

20% total GHG's

Approved policies



Approved policies



Approved policies



OFFICE + RETAIL
>100K ft²
2026 limits
~45 buildings

2040 limits
~175 buildings

Approved policies



ALL BUILDINGS
except 1+2 family homes

2023
repeal existing building energy
upgrade requirements
VBL part 11

Approved policies



Thank you!

Website: vancouver.ca/zeroemissions

General Inquiries: Green.Buildings@Vancouver.ca

Staff Contact

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