

# RESORT MUNICIPALITY OF WHISTLER

STEP CODE and Zero Carbon Step code

April 5, 2023



WHISTLER: A PLACE WHERE OUR COMMUNITY THRIVES, NATURE IS PROTECTED AND GUESTS ARE INSPIRED.



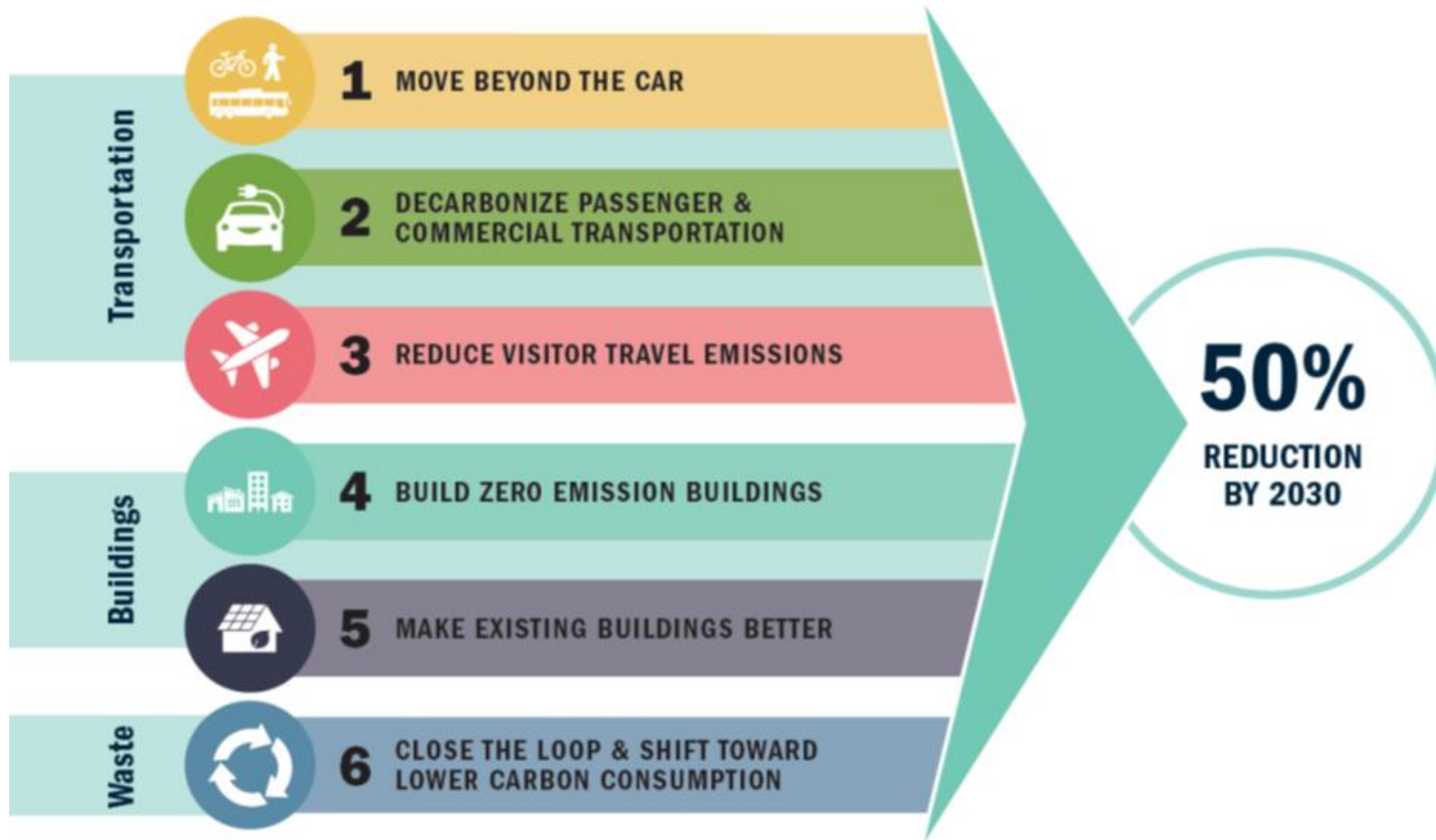
# Agenda

- Background
- Recap of previous engagement
- BC Building Code Changes
- RMOW's approach to accelerate Step Code implementation and reducing GHG emissions from new buildings



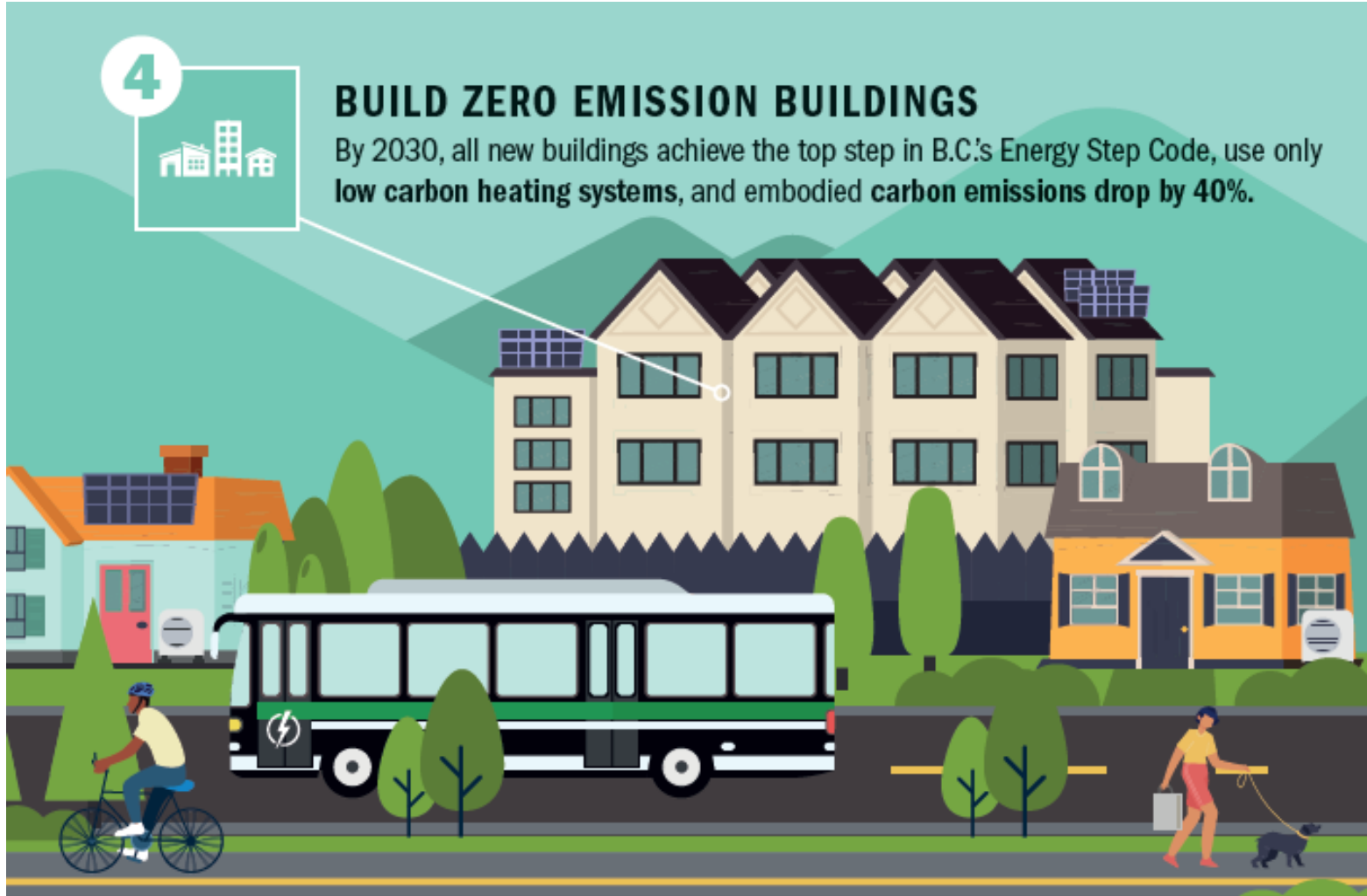
# **RMOW CLIMATE ACTION BACKGROUND**

# Climate Action Big Moves Strategy



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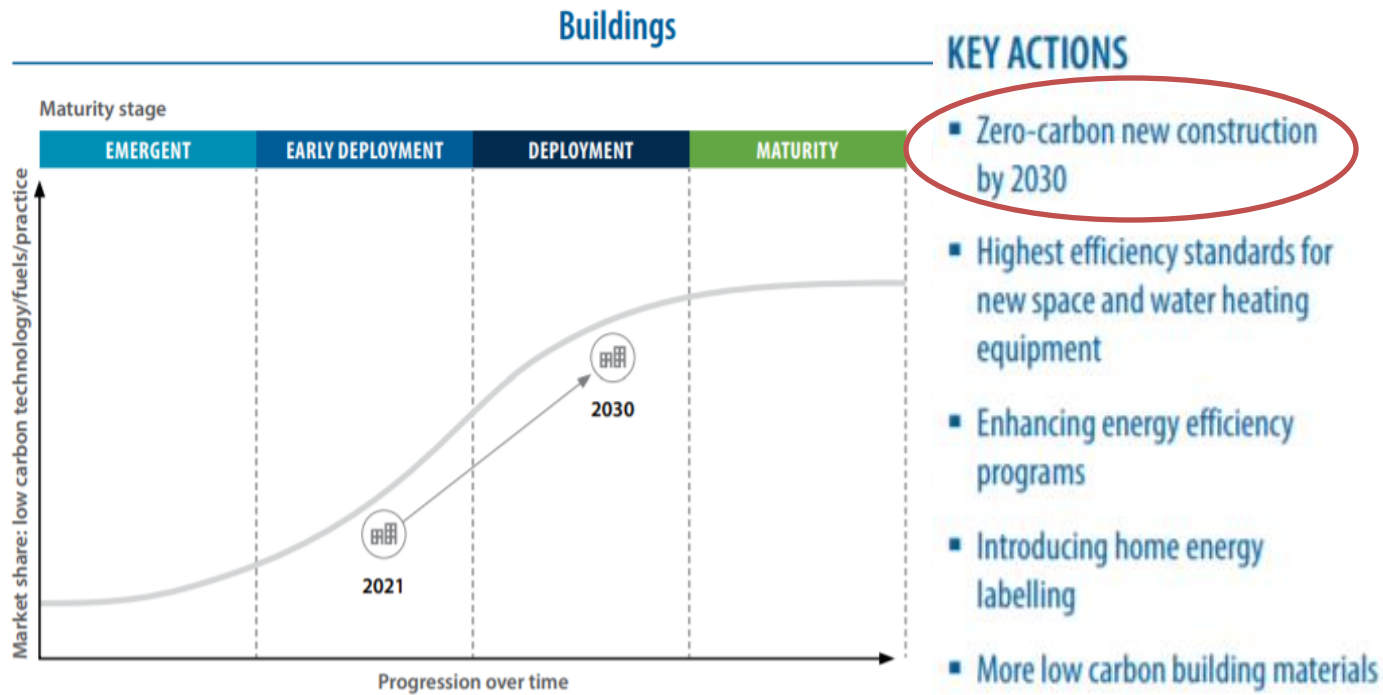
# Addressing GHG Emissions from New Buildings



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# Provincial Building Targets

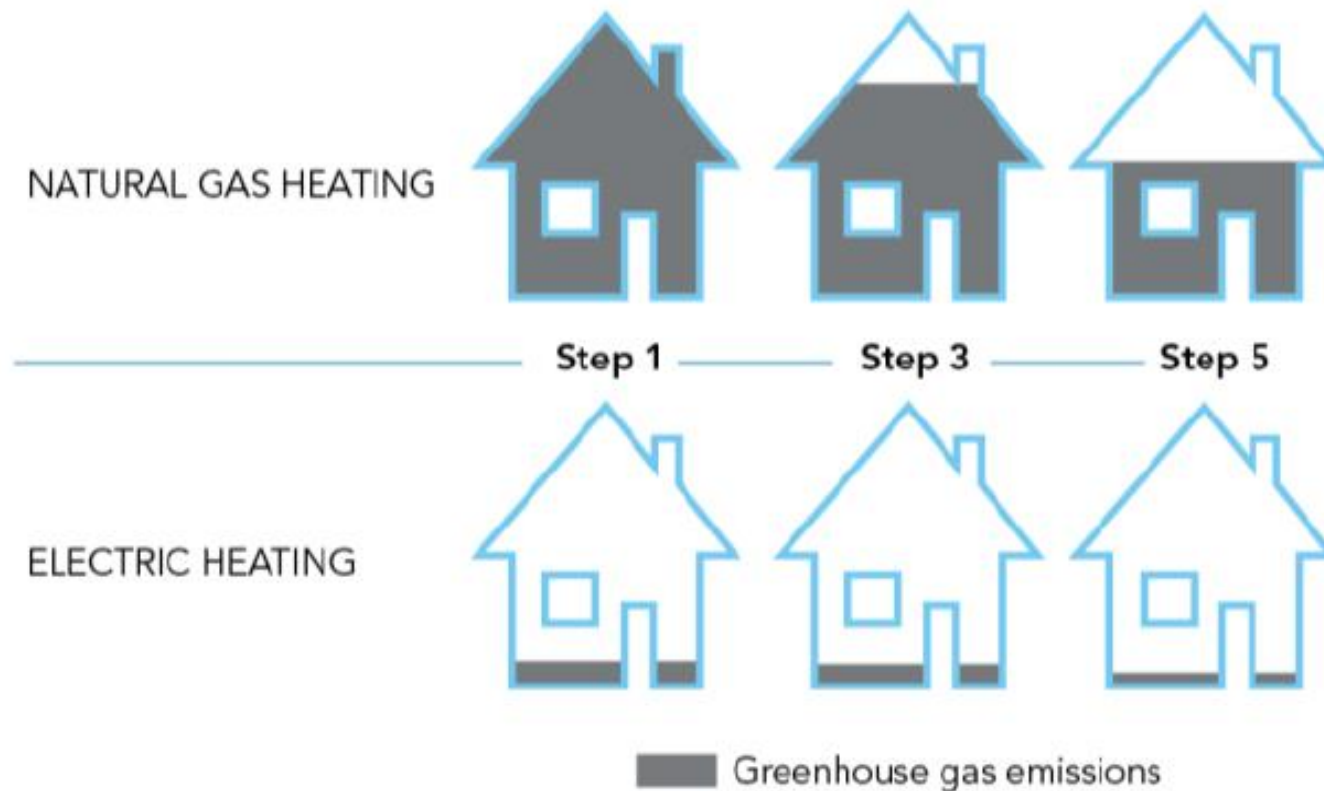


**cleanBC**  
our nature. our power. our future.

## Roadmap to 2030

Until recently, municipalities have had limited authority to regulate GHG emissions

# BC Energy Step Code Does not Limit GHG Emissions



Greenhouse gas emissions by heating type and energy step (source: [Metro Vancouver Climate 2050 Buildings Discussion Paper](#).)

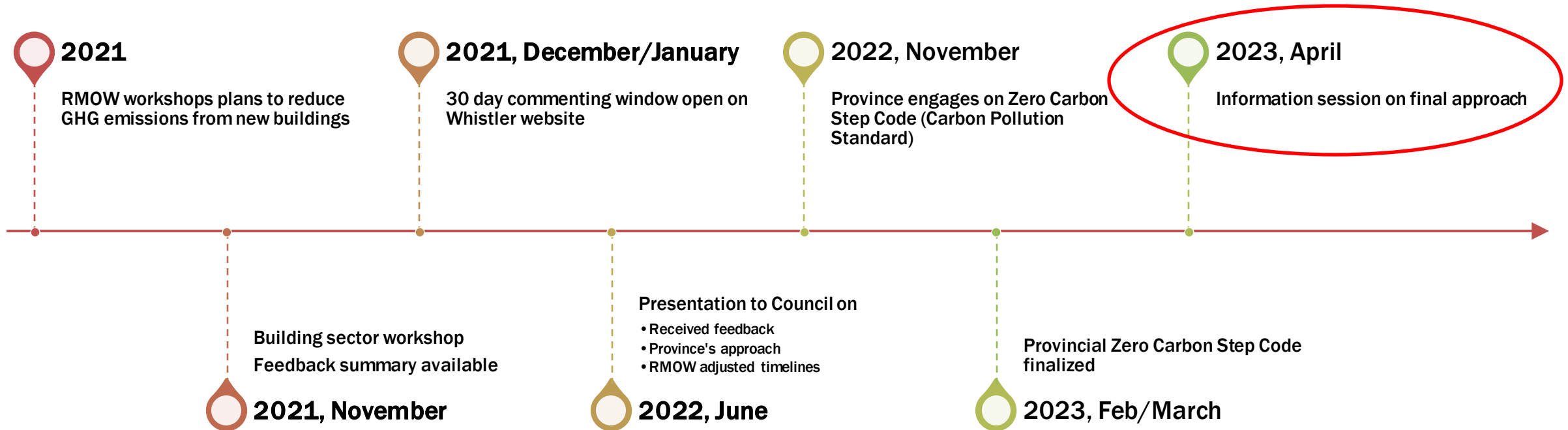
A group of people are seated around a long wooden table in a modern office setting. The room has large windows on the right side, offering a view of a city street with buildings. The interior is decorated with white, cloud-like pendant lights. On the left, there is a whiteboard on a stand. The overall atmosphere is professional and collaborative.

# RECAP OF PREVIOUS ENGAGEMENT

*November 2021*



# Recap and Engagement



# Proposed Approach – November 2021

Proposed Approach 1

Energy Step Code relaxation with Low Carbon Energy System (LCES)

Proposed Approach 2

Adopt Provincial Carbon Pollution Standard

# What We Heard

*General support for the proposed approaches!*

## Additional considerations and supports

- ✓ Provide clear implementations timelines to give industry time to adjust
- ✓ Support capacity building for trades and industry
- ✓ Communicate the non-carbon/energy benefits to home and building owners
- ✓ Consider providing flexibility for unique situations

--> *Feedback summary available for more details*

A photograph of a modern, multi-story apartment building. The building features a mix of light-colored horizontal siding and dark wood paneling. It has several balconies with dark metal railings. Some balconies have blue planters with green plants. The building is set against a clear blue sky. The text "BC BUILDING CODE CHANGES" is overlaid in the center in a bold, blue, sans-serif font.

# BC BUILDING CODE CHANGES

# Provincial Building Code

On May 1, 2023, the Province is changing the BC Building Code:

Energy Efficiency



Carbon Pollution Standard



Image Source: Building Safety and Standards Branch



# Province-wide Energy Step Code

On May 1, 2023, the Province will increase the BC Building Code to be 20% more efficient (than 2018 code), which is equivalent to:

- ✓ Step 3 for Part 9 buildings
- ✓ Step 2 for Part 3 buildings

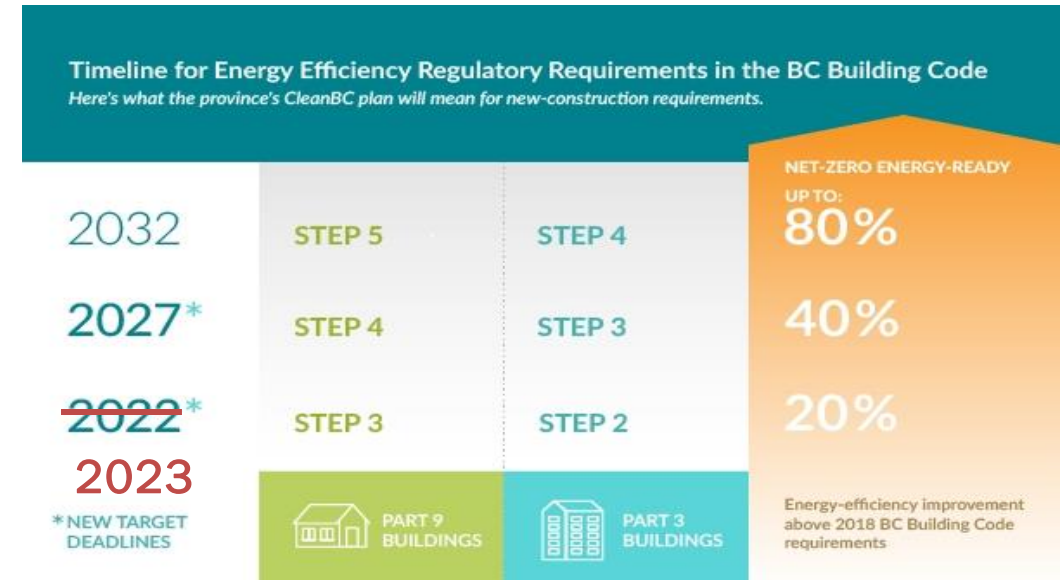


Image Source: Energy Step Code

# Province-wide Zero Carbon Step Code



ZERO CARBON  
**STEP**CODE

Building carbon pollution standard  
for operational carbon



Image Source: Building Safety and Standards Branch

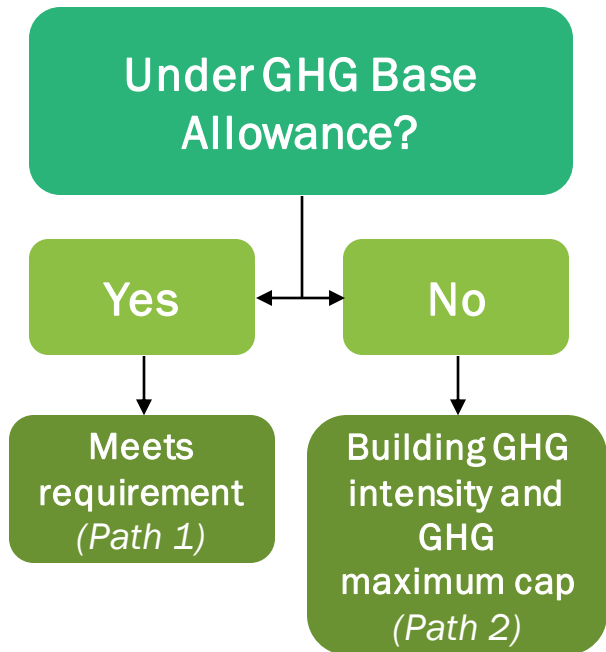
# Zero Carbon Step Code– Part 3 Buildings

- BC Building Code will include GHGI targets differentiated based on occupancy types. Targets were made to be achievable at Step 2 in all climate zones in B.C.
- GHGI targets align with modelled points of decarbonization

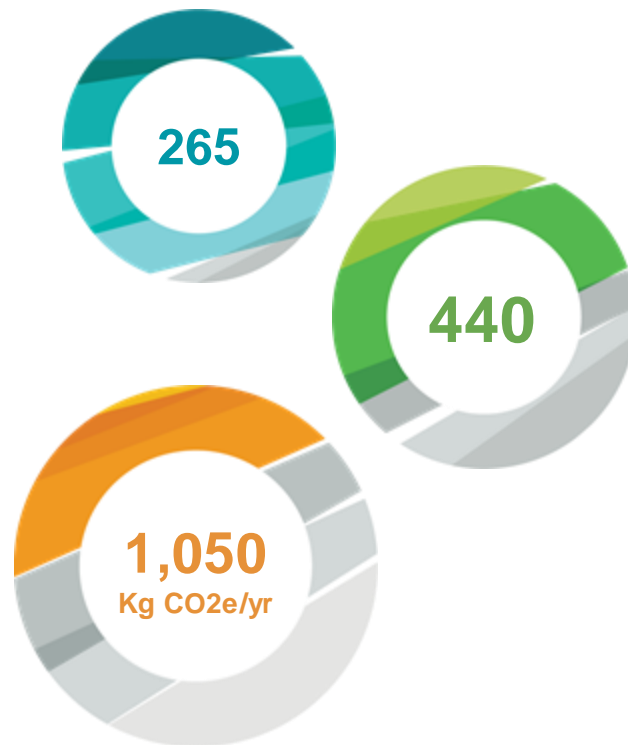
Building Type	Moderate (EL-2)*	Strong (EL-3)*	Zero Carbon (EL-4)*
MURB	7	3	1.8
Office	5	3	1.5
Retail	6	3	2
Hotel	9	4	2

\*GHG Emission Level in kgCO<sub>2</sub>e/m<sup>2</sup>/year

# Zero Carbon Step Code – Part 9 Buildings

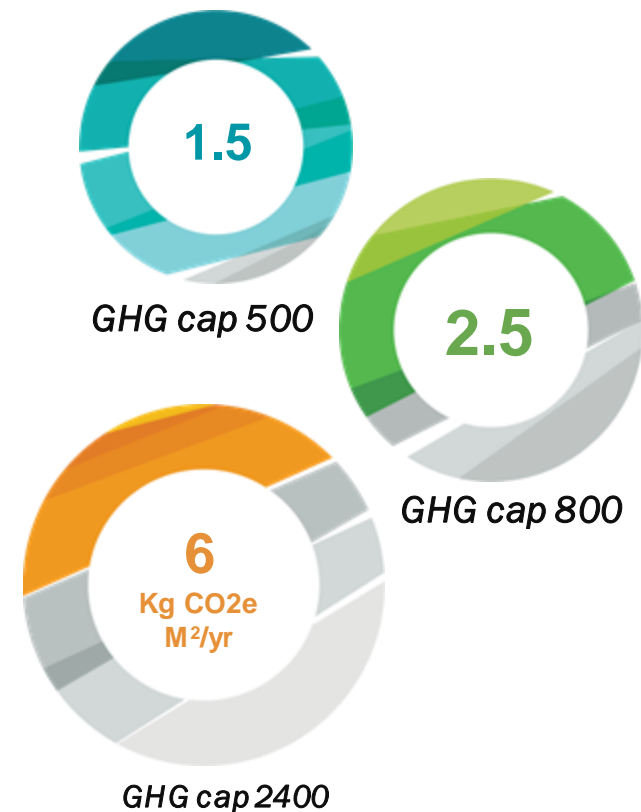


## Compliance Path #1 Quantity of carbon pollution



Maximum GHG emissions per home per year

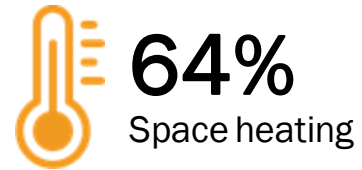
## Compliance Path #2 Intensity of carbon pollution



Maximum GHG intensity per home per year

# Low-carbon Homes

Fossil fuel space and water heating equipment contributes the majority of household GHG emissions:



Zero carbon electric equipment:



Electric heat pump



Electric water heater



Induction stove



# Secondary Heating Systems

The Zero Carbon Step Code regulates **primary space-heating equipment**. Secondary heating systems are exempted.



**Wood-burning  
stoves OK**



**Decorative  
fossil-fuel  
fireplaces OK**

A photograph of a modern, multi-story apartment building. The building features a mix of light-colored horizontal siding and dark brown vertical siding. It has several balconies with dark metal railings. Some balconies have blue planters with green plants. The building is set against a clear blue sky. The text "RMOW STEP CODE IMPLEMENTATION UPDATE" is overlaid in the center in a bold, blue, sans-serif font.

# RMOW STEP CODE IMPLEMENTATION UPDATE

# Whistler – Implementation Approach

*Whistler will be pursuing an Energy Step Code increase, with the provincial Zero Carbon Step Code (formerly Building Carbon Pollution Standard)*



# RMOW's Proposed Approach - *UPDATED*

Building type		Approach* January 2024
Part 9	Single Family Dwelling, duplex, or townhomes	Step 4 with <b><u>Strong</u></b> Carbon Performance (EL-3)
	SFD or duplex with in-ground basement floor area exclusion	Step 5 with <b><u>Strong</u></b> Carbon Performance (EL-3)
Part 3	Residential	Step 3 with <b><u>Strong</u></b> Carbon Performance (EL-3)
	Commercial	Step 2 with <b><u>Strong</u></b> Carbon Performance (EL-3)

\*To be adopted by Council

# RMOW's Proposed Approach – *LONG-TERM*

Building type		Approach*	
		January 2024	2026 onward
Part 9	Single Family Dwelling, duplex, or townhomes	Step 4 with <b>Strong</b> Carbon Performance (EL-3)	Step 4 with <b>Zero</b> Carbon Performance (EL-4)
	SFD or duplex with in-ground basement floor area exclusion	Step 5 with <b>Strong</b> Carbon Performance (EL-3)	Step 5 with <b>Zero</b> Carbon Performance (EL-4)
Part 3	Residential	Step 3 with <b>Strong</b> Carbon Performance (EL-3)	Step 3 with <b>Zero</b> Carbon Performance (EL-4)
	Commercial	Step 2 with <b>Strong</b> Carbon Performance (EL-3)	Step 3 with <b>Zero</b> Carbon Performance (EL-4)

\*To be adopted by Council

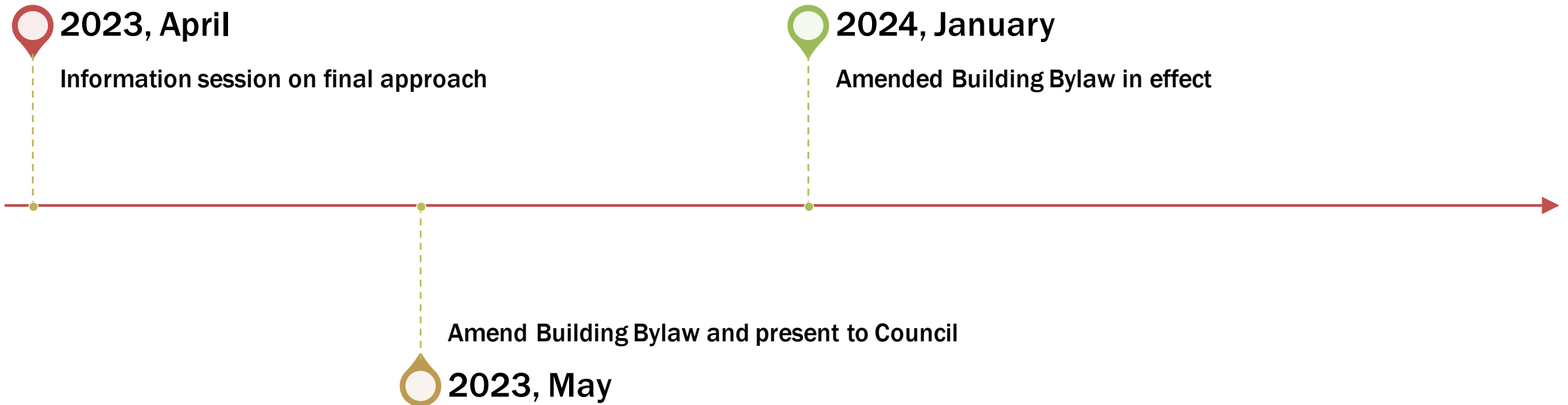


# Resources

For more details about the Zero Carbon Step Code visit:

- ✓ [Ministerial Order No. M40 \(PDF\)](#), amending the Building Act General Regulation effective May 1, 2023
- ✓ [Ministerial Order BA 2023 08 \(PDF\)](#), amending the BC Building Code effective May 1, 2023
- ✓ [Read the convenience copy of the code changes \(PDF for information only\)](#)
- ✓ [Zero Carbon Step Code: An introduction](#)
- ✓ [Energy Step Code Part 9 Compliance Tools](#)
- ✓ [Energy Step Code Part 3 Compliance Tools](#)

# Next Steps





# THANK YOU



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