

# RMOW Step Code Implementation

November 28, 2023

# Today's Presentation

1. Whistler buildings and climate change
2. Overview of the Zero Carbon Step Code
  - Part 9 building compliance options
  - Part 3 building compliance options
3. Zero Carbon Step Code adoption in Whistler

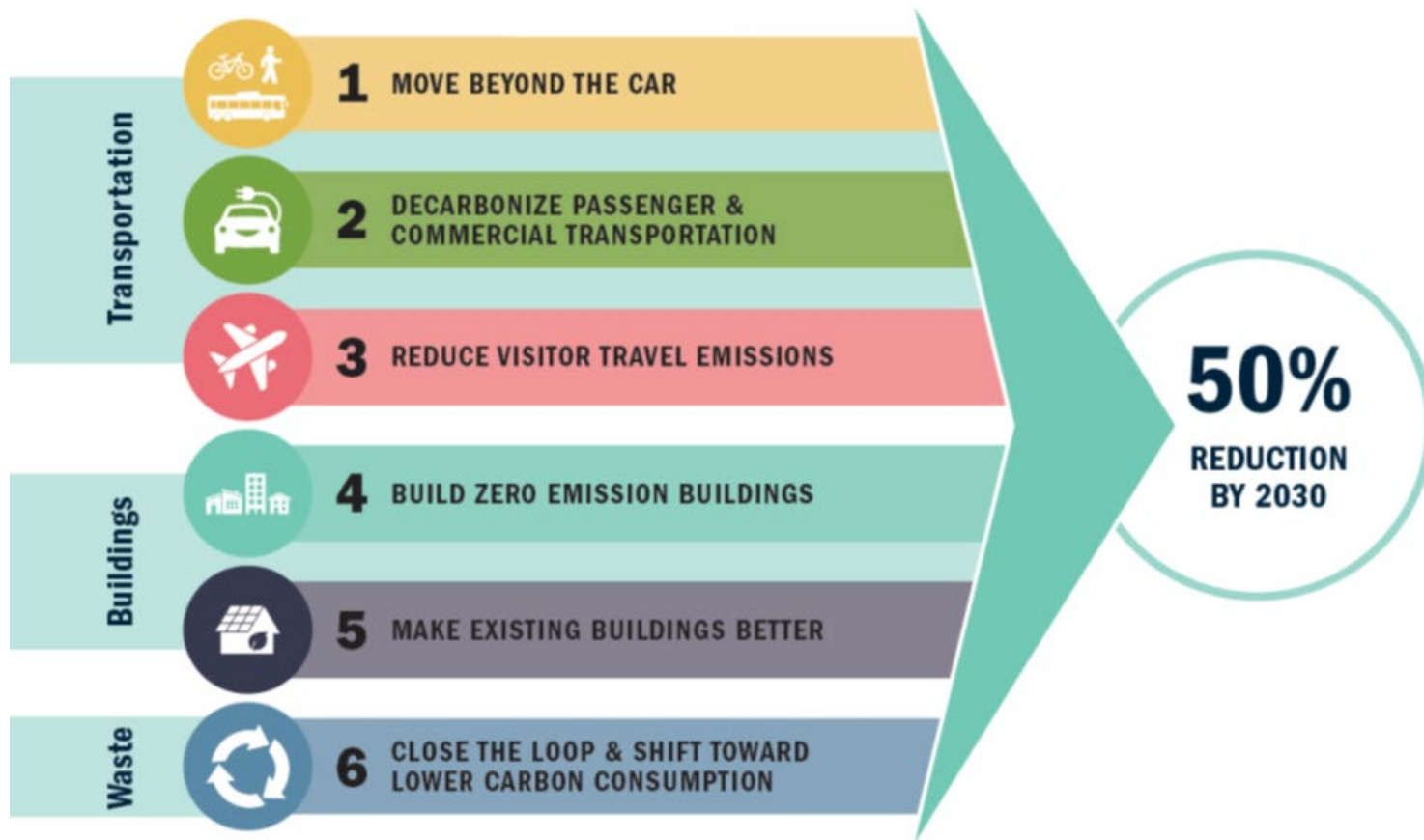


# Whistler Buildings and Climate Change

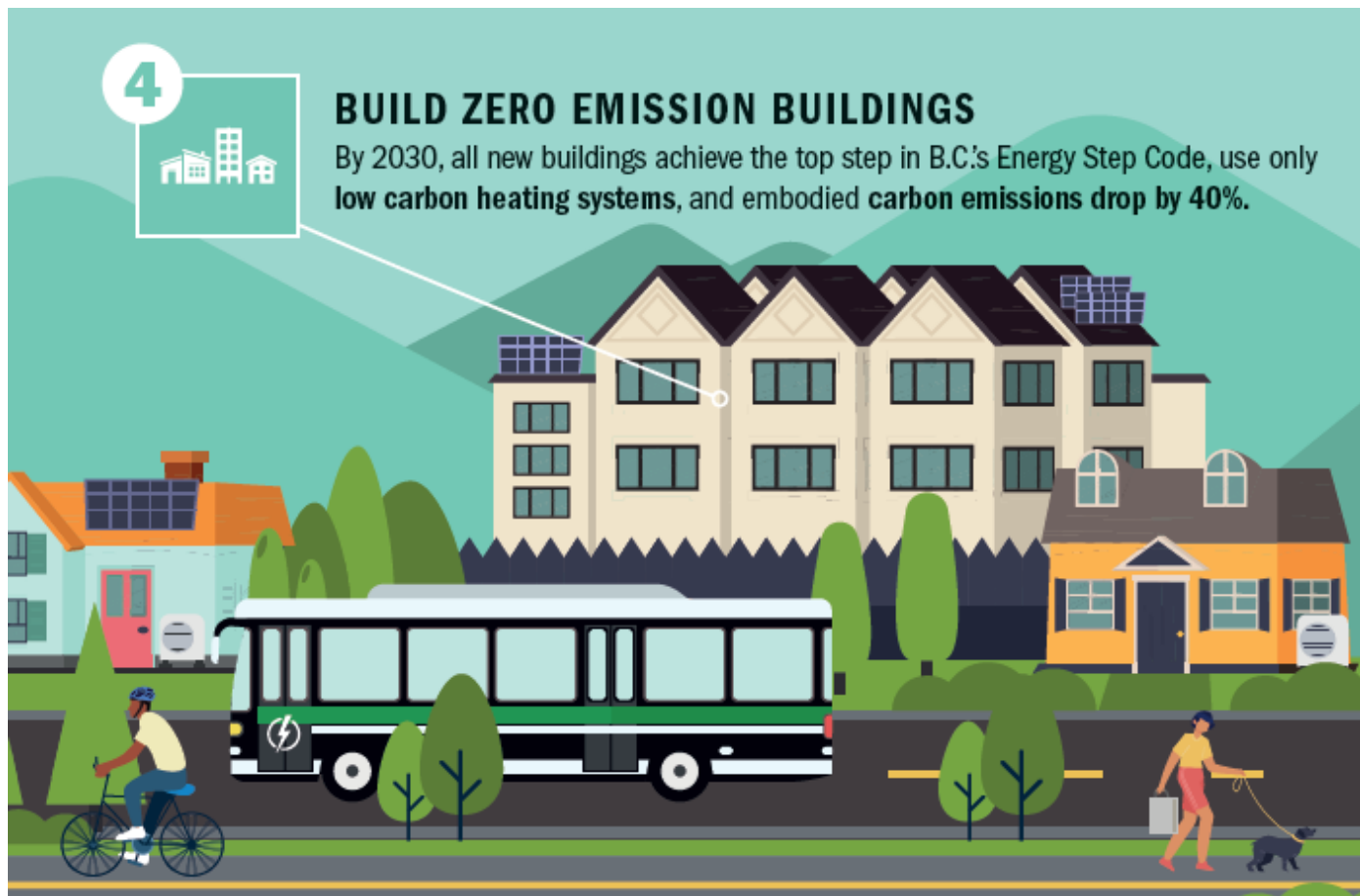




# Climate Action Big Moves Strategy



# GHG Emissions from New Buildings



# Residential Building Emission Sources

Natural gas **space and water heating equipment** contributes the majority of household carbon pollution.



**64%**

Space heating



**35%**

Water heating



**1%**

Cooking

# Overview of the Zero Carbon Step Code



# Origin of the new regulation



**“By 2030, all new buildings will be zero carbon, and all new space and water heating equipment will meet the highest standards for efficiency.”**

*– CleanBC Roadmap to 2030*



# Staggered carbon performance tiers



***Note:** The Zero Carbon Step Code only regulates **indoor equipment**. It does not restrict outdoor grills, heated driveways, nor pools.*

# Types of buildings regulated

## Part 9:

Smaller + simpler buildings, specifically...



Homes and smaller residential buildings

## Part 3:

Larger and more complex buildings, including...



Offices



Condos + apartments



Financial institutions



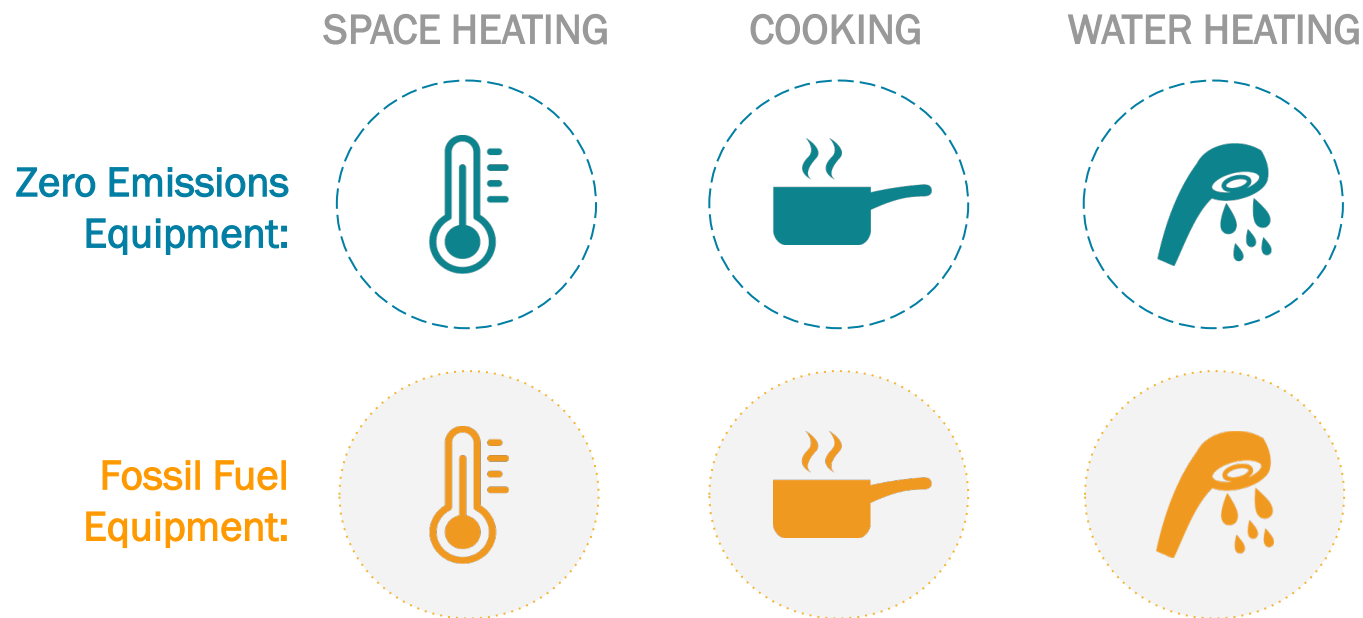
Retail + grocery stores



## Part 9 homes compliance options:

- Prescriptive pathway
- Performance pathway

# Part 9 Buildings: The **prescriptive path** for Zero Carbon Step Code compliance



# Zero-carbon electric equipment

Electric heat pump



Electric water heater



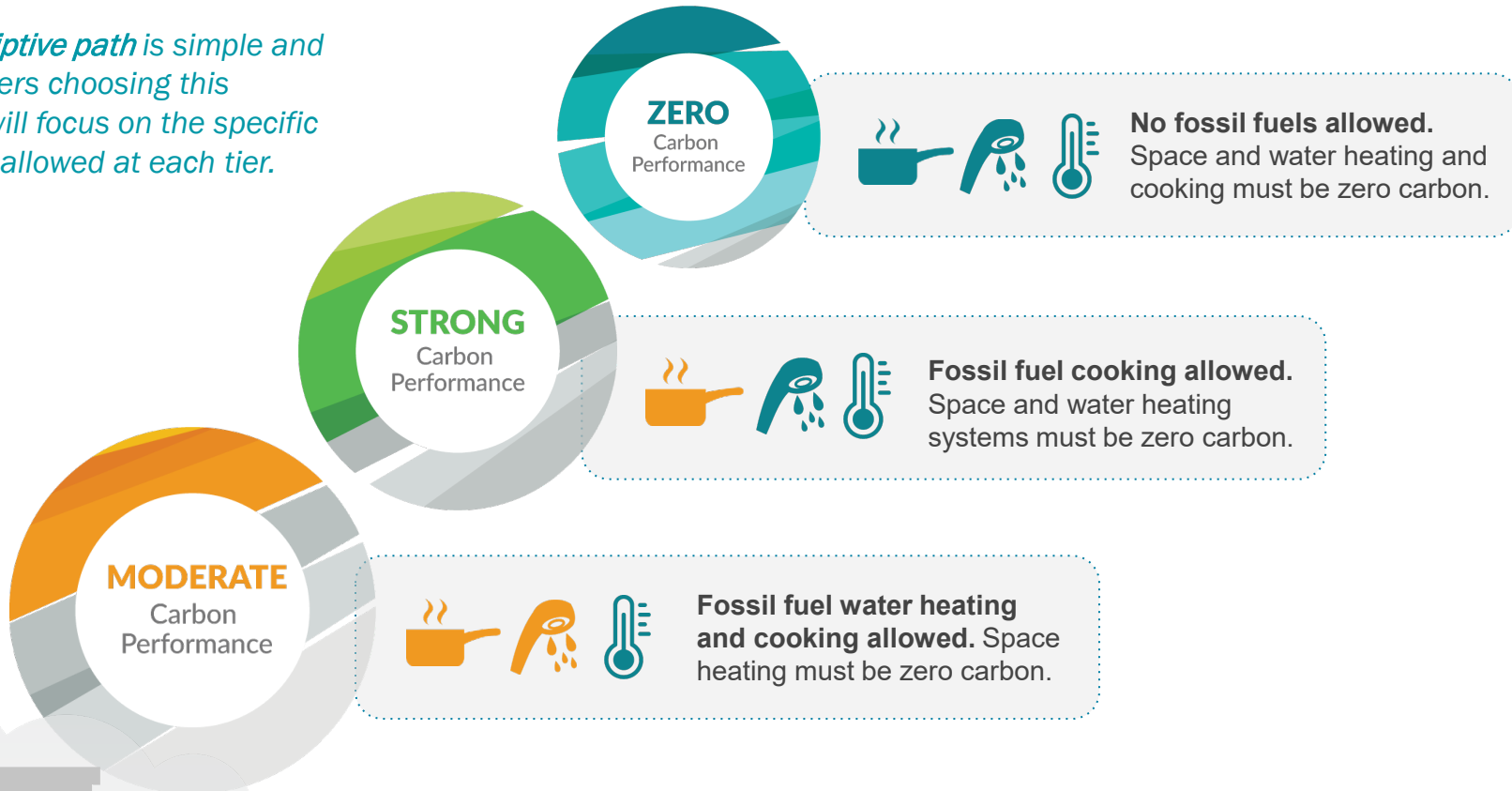
Induction stove





# Part 9 Buildings: The **prescriptive path** for Zero Carbon Step Code compliance

*The prescriptive path is simple and clear; builders choosing this approach will focus on the specific equipment allowed at each tier.*



# Part 9 Buildings: The **performance path** for Zero Carbon Step Code compliance

*Builders choosing this approach will focus on decarbonizing heat and hot water; they can still include fossil fuels in cooking and other minor end uses.*



## Homes at this tier must emit:

- <500 kg CO<sub>2</sub>e per year and
- <1.5 kg CO<sub>2</sub>e per m<sup>2</sup> per year GHG intensity



## Homes at this tier must emit:

- <800 kg CO<sub>2</sub>e per year and
- <2.5 kg CO<sub>2</sub>e per m<sup>2</sup> per year GHG intensity



## Homes at this tier must emit:

- <2,400 kg CO<sub>2</sub>e per year and
- <6 kg CO<sub>2</sub>e per m<sup>2</sup> per year GHG intensity

**Note:** Calculations only consider emissions produced by heating, cooling, ventilation, and domestic hot water equipment. Builders need not include emissions from auxiliary end uses (e.g., cooktops or clothes dryers) nor backup heating sources (e.g., wood stoves or decorative gas fireplaces) that are not designed to cover the home's entire heating load. They may include this equipment at any tier.

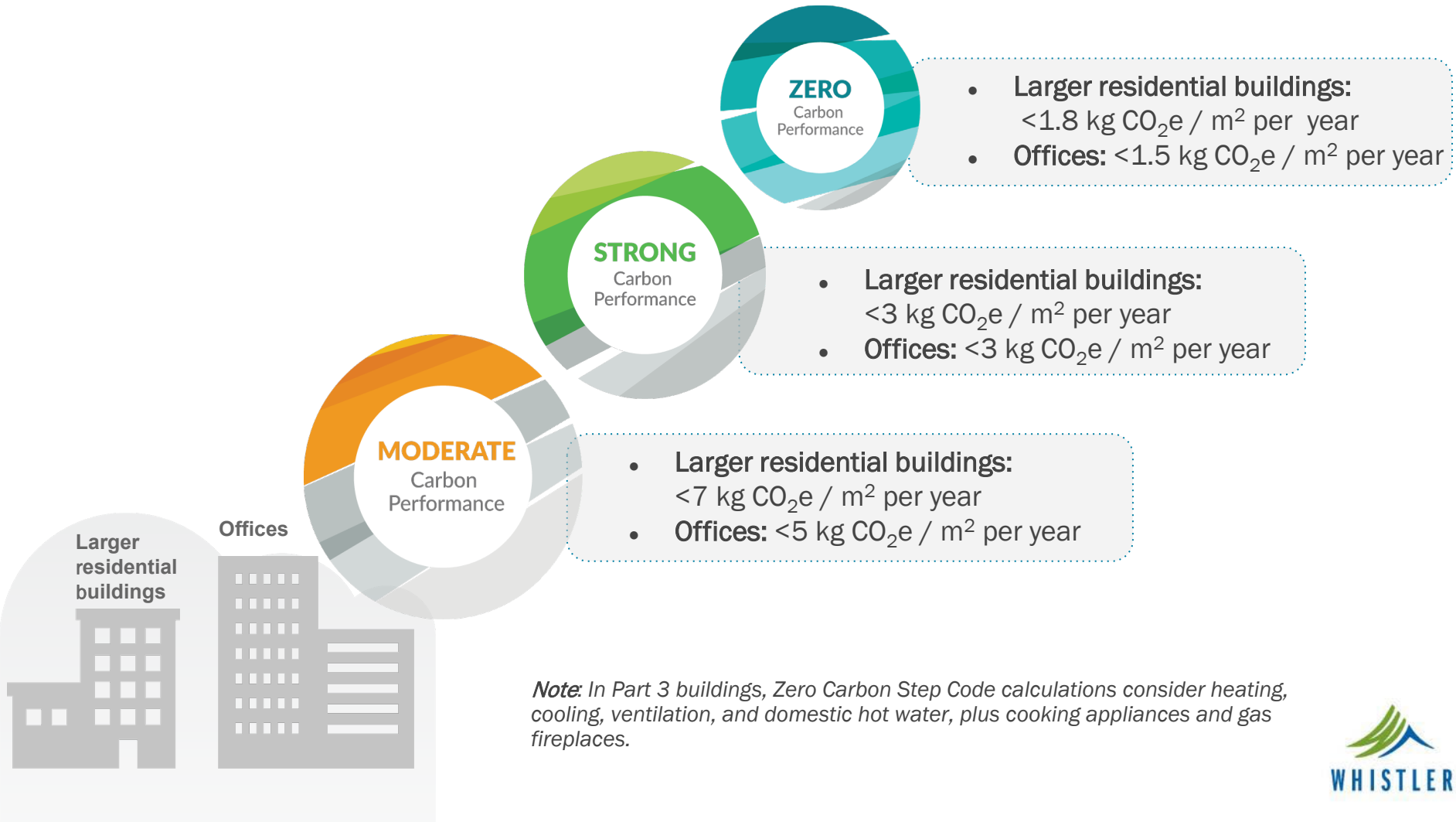




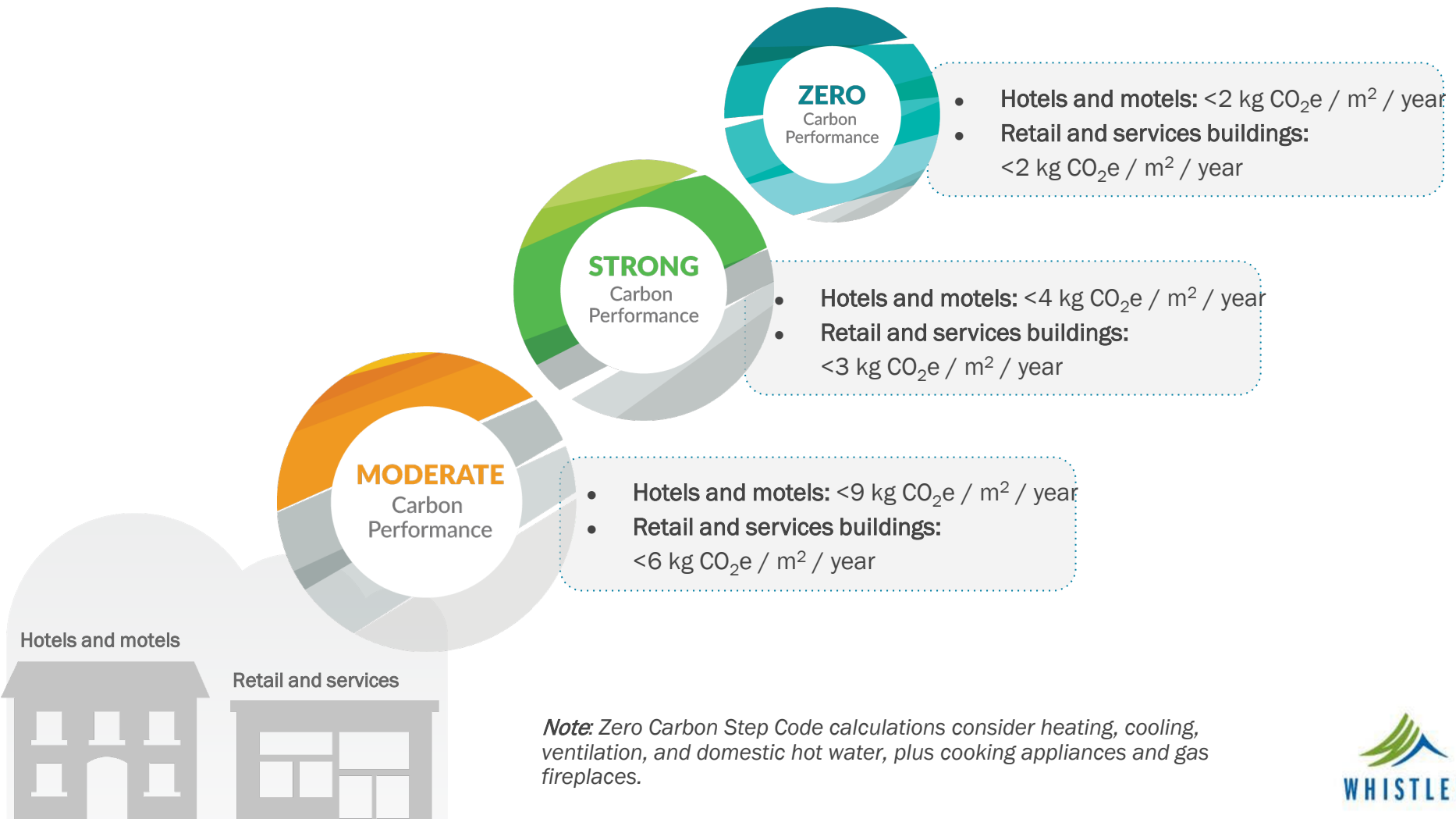
## Part 3 larger buildings compliance options:

- Performance pathway

# Part 3 Buildings: The **performance path** for Zero Carbon Step Code compliance

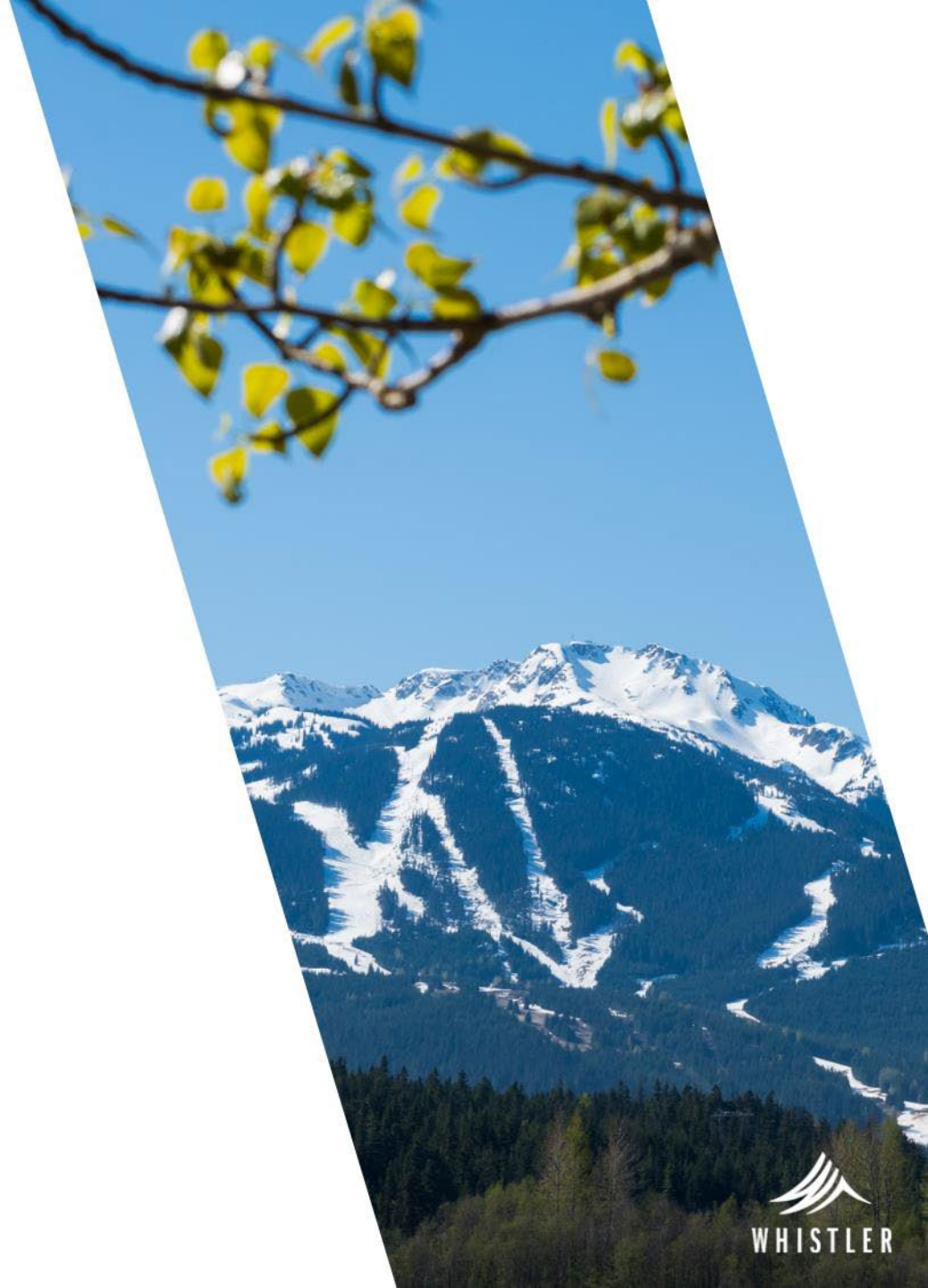


# Part 3 Buildings: The **performance path** for Zero Carbon Step Code compliance

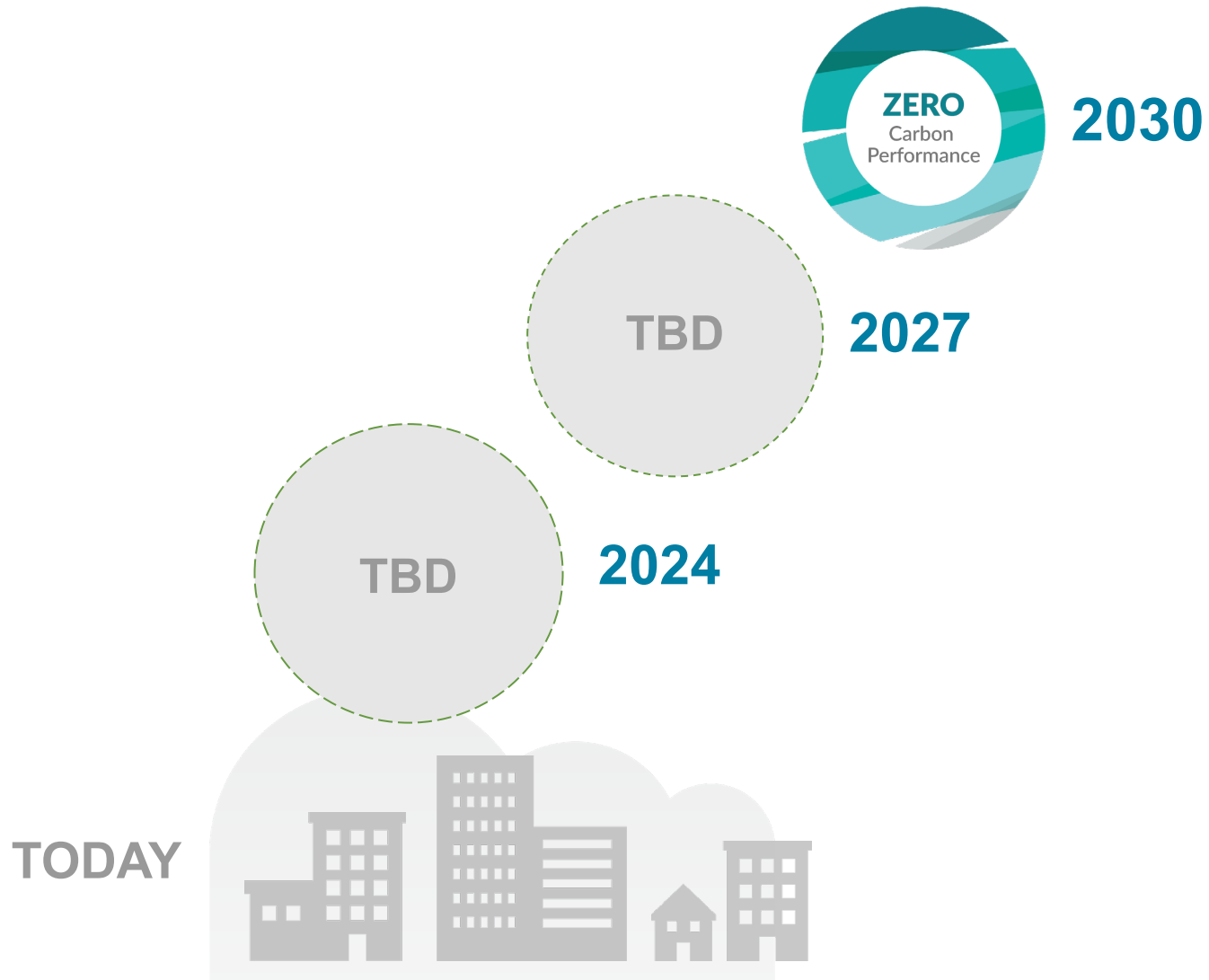




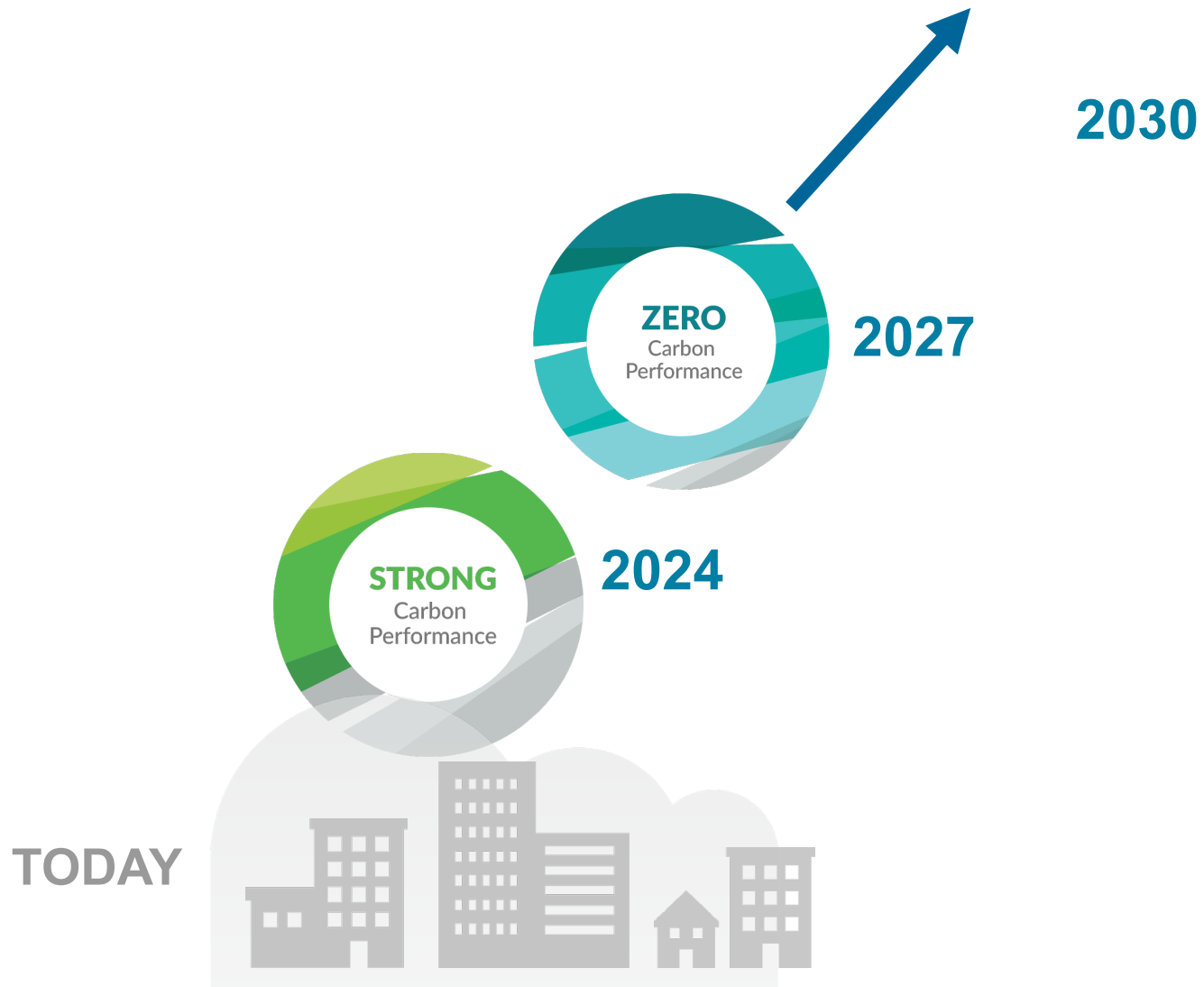
# Zero Carbon Step Code in Whistler



# Provincial Timeline



# RMOW Timeline



# RMOW Approach – Long Term

Building type		Approach	
		January 2024	2027 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)

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# 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)
- [Information Bulletin No.B23-01](#), plain language description of the building code changes
- [Information Bulletin No. 23-02](#), technical information about available compliance paths for different Part 9 Buildings
- [Information Bulletin No. B23-03](#), technical information about the Zero Carbon Step Code