

# Introduction to Zero Carbon Step Code



ZERO CARBON

STEP CODE



Comox Valley  
REGIONAL DISTRICT



The Carbon Code has four levels of increasing strictness and focuses on greenhouse gas (GHG) emissions from building operations, namely space heating, water heating and indoor cooking. In 2030, the BC Building Code will require all new buildings to be Zero Carbon.



The Energy Step Code is focused on the energy efficiency of buildings by three basic principles:

- How much air leaks through the building envelope (air tightness);
- The amount of annual heating energy needed to maintain a stable interior temperature;
- The efficiency of mechanical equipment.

# Staggered carbon performance tiers



Zero Carbon (GHG Emission Level 4) - in most cases, will require the full electrification of a building.



Strong carbon (GHG Emission Level 3) - in most cases, will require electrification of both space heating and domestic hot water systems; and



Moderate carbon (GHG Emission Level 2) - in most cases, will require electrification of either space heating or domestic hot water systems;



Measure-only (GHG Emission Level 1) - requires measurement of a building's emissions without reductions;

# Comox Valley Regional District 2022-2023 Permit Review

- 17 of 241 new dwelling units are using gas as their primary heat source.
- 108 had a permit for natural gas or propane through Technical Safety BC
- Various gas appliances such as fireplaces, hot water on demand systems, or cooking facilities (indoor and/or outdoor).



# Benefits of a Phased Approach

- Balances the need for immediate climate action with the practical considerations of the local building industry
- Time for builders and developers who are less experienced with high performance buildings to gain necessary skills and capacity.
- Allow staff to support community education about the Zero Carbon Step Code and respond to potential concerns
- Staff will prepare a communication plan, including education sessions in conjunction with other updates to the Comox Valley Regional District's building bylaw and a "Question and Answer" page on our website.
- Work with neighbouring municipalities to collaborate on opportunities that will be mutually beneficial

## Recommendation from the Acting Chief Administrative Officer:

THAT staff be directed to report back with a proposal to adopt the Zero Carbon Step Code with phased implementation.

