



BC Energy Step Code

What is Energy Step Code?

BC Energy Step Code is an optional compliance path in the BC Building Code that local governments may use to incentivize or require a level of energy efficiency in new construction that goes beyond the requirements of the BC Building Code.

How does Energy Step Code work?

Energy Step Code establishes a series of measurable energy-efficiency requirements that builders must meet in communities that adopt it. The BC Energy Step Code groups these performance requirements into a series of “steps” of increasing energy efficiency.

What are the “Steps”?

The steps are categorized into lower and upper steps according to building types.

Step 1 is classified as “enhanced compliance” as it simply required builders to confirm that their new building meets the existing energy-efficiency requirements of the existing BC Building Code. To achieve Step 1, builders need to use a whole-building energy model to calculate the energy use of the building and conduct an airtightness test, but the

performance of the building only needs to be as good as the base BC Building Code requirements for energy efficiency. The purpose of Step 1 is to familiarize builders with a new way of measuring energy efficiency although the actual construction of the building remains the same as conventional construction.

Meanwhile, at the opposite end of the scale, Step 5 for homes represents a home that is net-zero energy ready which is the most energy-efficient home that can be built today.

What does net zero energy ready buildings mean?

A net zero energy ready building can be defined as a building built to energy-efficient standards such that it could (with additional measures) generate enough onsite energy to meet its own energy needs.

Net zero energy buildings produce as much clean energy as they consume, they are up to 80 percent more energy efficient than a typical new building and use on-site or near-site renewable energy systems to produce the remaining energy they need.

What is the goal of Energy Step Code?

Energy Step Code aims to communicate the future intent of the Building Code and improve consistency in building requirements across BC to transition to net zero energy ready buildings by 2032. It is a tool to encourage or require the construction of more energy efficient buildings in their communities, and to do so in a consistent, predictable way.

Benefits of Energy Step Code?

Buildings built to higher energy efficiency standards also provide multiple benefits to homeowners including:

- Improved temperature management, increasing comfort
- Better managed air through the building, improving health
- Better soundproofing, reducing exterior noise
- Less energy usage, reducing utility bills

Other benefits include:

- Reduction in GHG emissions
- Create new economic development opportunities
- Creates consistency in energy efficiency throughout BC
- Helps achieve climate-action goals

Trade-offs of Energy Step Code?

Trade-offs include:

- Increased construction costs particularly for upper steps
- Local government staff and builders will require training
- Meeting Energy Step Code requirements may influence building design

When will Energy Step Code become mandatory?

The tentative date that Energy Step Code will become mandatory in the Building Code is December 2022.

Will the RDCO incorporate Energy Step Code?

The RDCO will shortly be engaging its communities and industry professionals to build skills and knowledge while considering implementation options.

What Steps are currently in effect in the region?

City of Kelowna:

- Step 3 for Part 9 buildings
- Single detached residential occupancy increasing to Step 4 on January 1, 2022

District of Peachland:

- Step 1 for Part 9 buildings

City of West Kelowna

- Following Building Code requirements, Energy Step Code not implemented

District of Lake Country:

- Step 3 for most Part 9 buildings

RDCO:

- Following Building Code requirements, Energy Step Code not implemented

What resources are available to help me with Energy Step Code?

Please visit energystepcode.ca for more information about Energy Step Code.

What rebates/incentives are available for Energy Step Code?

Fortis BC offers their New Home Program. Please visit fortisbc.com/rebates for more information.

BC Hydro provides rebates and free programs and has launched the Power Smart Shop for energy efficient products. Please visit bchydro.com/powersmart for more information.

Rebates can also be found through the Rebate Search Tool offered by CleanBC Better Homes. Please visit betterhomesbc.ca/rebate for more information.

What is an Energy Advisor?

Energy Advisors are third party consultants registered by service organizations licensed by Natural Resources Canada (NRC). They deliver NRC's EnerGuide Rating System, ENERGY STAR for New Homes and R-2000 programs. They can provide both energy modelling and airtightness testing, the two services needed to demonstrate compliance under the BC Energy Step Code for Part 9 residential buildings.

How can I find an Energy Advisor?

Energy Advisors can be found through the Program-Qualified Energy Advisor Search Tool. Please visit betterhomesbc.ca/ea for more information.

They can also be found through the Natural Resources Canada.

Training Opportunities?

Please review rdco.com/building for more detail regarding training and educational opportunities for Energy Step Code.

Where can I find updates regarding Energy Step Code and RDCO's implementation process?

Please review rdco.com/building for RDCO updates regarding Energy Step Code.

Please complete the RDCO's short online survey to provide your input on Energy Step Code.

