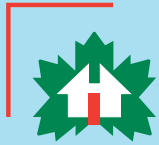




ENERGY
STEP CODE
BUILDING BEYOND THE STANDARD

How it works

PREPARED
BY



CANADIAN
HOME BUILDERS' ASSOCIATION
CENTRAL INTERIOR

The Voice of the Residential Construction Industry in the Central Interior of BC

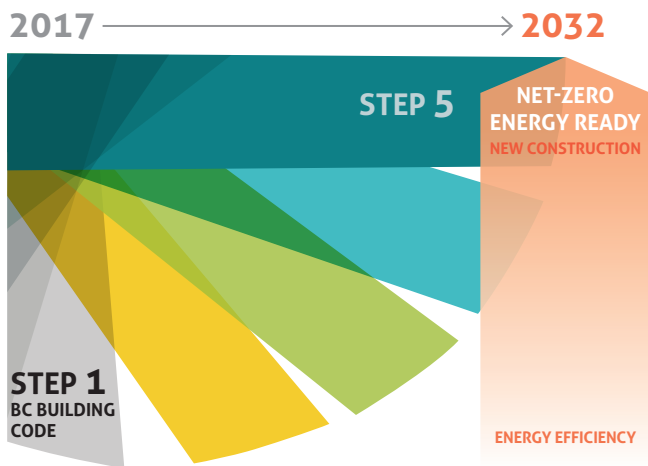


Learn more at www.chbaci.ca

WHAT IS THE BC ENERGY STEP CODE?

The **BC Energy Step Code** is a provincial standard enacted in April 2017 which provides an incremental and performance-based approach to achieving more energy-efficient buildings that go beyond the requirements of the base BC Building Code.

By establishing measurable, performance-based energy-efficient requirements for construction, builders can choose to build to the specifications and communities may *voluntarily* choose to adopt the BC Energy Step Code in bylaws and policies.



The BC Energy Step Code groups these energy-efficiency requirements into a series of “steps.”

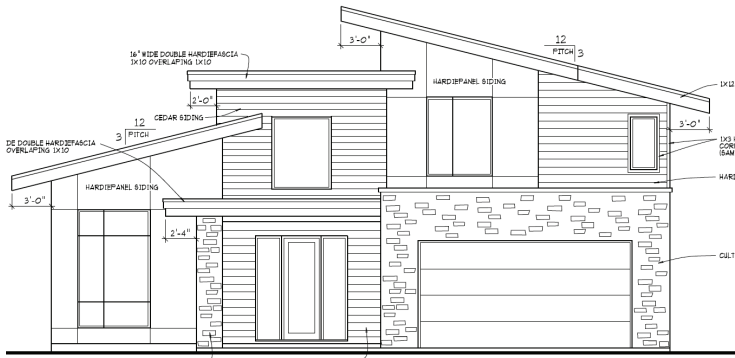
Step 1 entails modelling energy performance and measuring airtightness to ensure that a building will meet or exceed the minimum energy-efficiency requirements in the base BC Building Code. At the opposite end of the scale, Step 5 represents a “*net-zero energy ready*” standard – a standard that is being met by the most energy-efficient projects being developed today.



HOW DOES THIS AFFECT YOU?

Builders must hire a consultant to use energy modelling software and on-site testing to demonstrate that both their design and constructed building meet the requirements of the BC Energy Step Code.





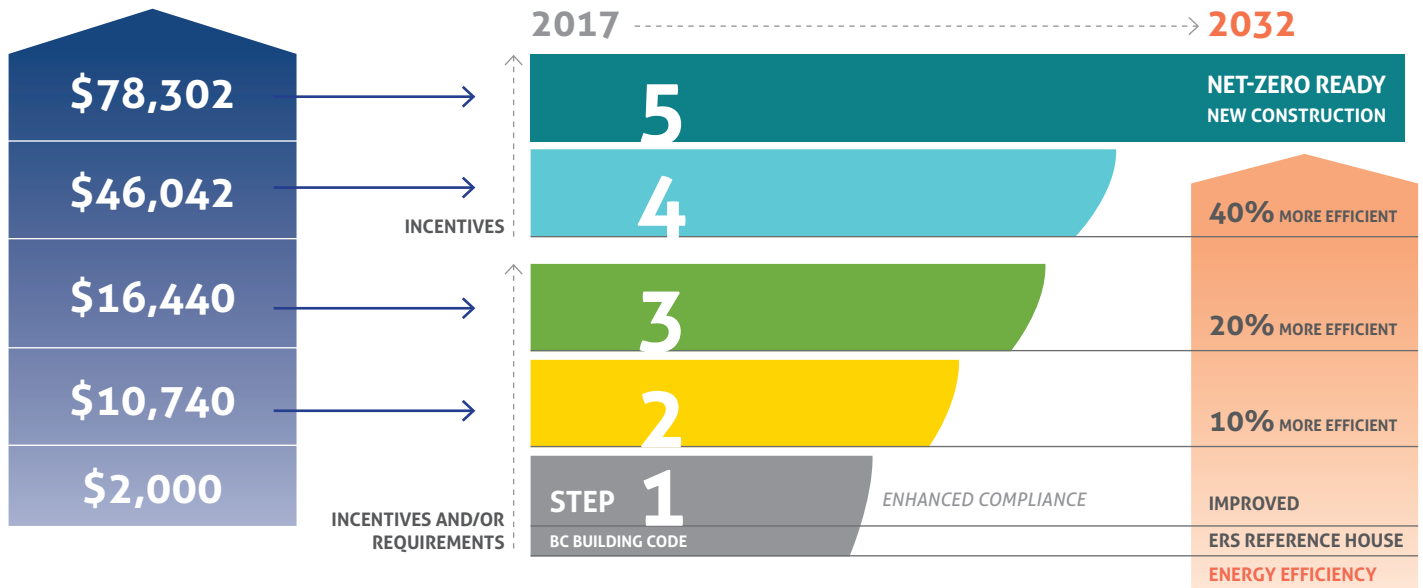
See guide: <https://energystepcode.ca/>

Example Cost Per Step

- Juniper Ridge Bergman Design
4,000 sq. ft.
- Building Cost (excluding Land)
\$520,000
before taxes at today's market (July 2017)

CHBA CENTRAL INTERIOR COSTING STUDY

ADDITIONAL COST AT EACH STEP



IS IT REQUIRED?

Yes and no. The BC Energy Step Code is currently voluntary. Local governments can choose to require or encourage builders to meet one or more steps of the BC Energy Step Code as an alternative to the BC Building Code's prescriptive requirements. If Kamloops joins the Step Code, it will be required for all new homes.



CONCERNS



1. Cost

Affordability is a big concern. Based on CHBA Central Interior's research, applying the B.C. Energy Step Code would add additional costs to a new average home.

	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Single Detached 4,000 sq ft house	\$2,000	\$10,740	\$16,440	\$46,042	\$78,302
Single Detached 2,000 sq ft house	\$2,000	\$17,000	\$21,000	\$26,900	\$42,435
Multi-Family row house	\$2,000	\$2,000	\$2,500	\$17,600	\$32,150

Case Study:

Other case studies conducted by the Province of B.C. and BC Housing show only the lowest cost option, which may not be the suitable option for home buyers or all new homes. Many of the first project for builders with the new code will also have higher than predicted costs as builders trial the new approach.

*Study does not include PST, GST, Building Permit, DCC's, carrying cost, etc.

2. No Energy Advisors

All new Energy Advisors are required to be trained and licensed by a recognized Natural Resources Canada Service Organization, and be able to produce a verified EnerGuide label. Otherwise, there will be no quality assurance process or auditing. It will take time to build the capacity of qualified energy advisors the city needs before joining the B.C. Energy Step Code. Right now, there are no energy advisors in Kamloops.

3. Training

Training on the new code requirements will need to be completed by everyone involved in the building process, including builders, staff, tradespeople, energy advisors and building inspectors. The new code is a big shift from the previous prescriptive approach.



ENERGY-EFFICIENCY CHANGES SHOULD NOT BE BORNE ONLY BY NEW HOME BUYERS – IT IS A COMMUNITY-WIDE ISSUE.

More demanding codes and standards will only impact new buildings which are already significantly more energy efficient than the average for existing housing stock. **New construction accounts for less than 1% of the overall housing stock on an annual basis.** The greatest opportunity to effect change is incentives in existing housing.