



Build an Even Better Home

Energy Star for New Homes: Builder Workshop

Fernie, BC

November 17th 2016

AGENDA

Time	Item
7.30 am	REGISTRATION & COFFEE
8.00 am	<ul style="list-style-type: none">• Welcome and Introductions
8.15 am	<ul style="list-style-type: none">• Background: Policy & Building Code
8:30 am	<ul style="list-style-type: none">• CHBA BC on how to build to ENERGY STAR. Richard Kadulski
9:25 am	<ul style="list-style-type: none">• Quick Break
9:35 am	<ul style="list-style-type: none">• CHBA BC on how to build to ENERGY STAR. Richard Kadulski
10:30am	<ul style="list-style-type: none">• New Home Presentation: Cynthia Curll BC Hydro
10:50 am	BREAK – transition to on-site presentation
11:10 am	<ul style="list-style-type: none">• Energy Advisor on working with builders to get EnerGuide & ENERGY STAR<ul style="list-style-type: none">○ Demonstration of blower door test○ Key components of an energy efficient home○ Technical questions and discussions• Builders perspective on energy efficient construction – key aspects of home.
11:50 am	<ul style="list-style-type: none">• Closing Remarks

Community Energy Association

- CEA is **charitable non-profit** society
- CEA supports local governments and communities across BC

Awareness & Recognition

- Workshops & Presentations
- Research & Publications
- Collaboration
- Climate & Energy Action Awards

Projects

- Planning
- Implementation
- Technology Acceleration
- Facilitation and management



Workshop funders and partners

Workshop Proudly Supported by:



Multiple drivers for improved energy performance:

- Local commitments – Climate Action Charter
- Provincial Commitments – Climate Leadership Plan
- Evolution of the Building Code:
 - Net Zero Ready by 2032
 - Step Code enacted by end of 2017
 - Emphasis on performance pathway: energy modeling

Building Act + Step Code

2015: Building Act introduced

- Governs building and construction in BC
- Provides consistency: the Province is the ONLY authority that may set building requirements

2016: Step Code developed

- Voluntary standards local governments can use to require energy performance beyond building code
- Improved consistency and predictability
- Indicator of future code requirements



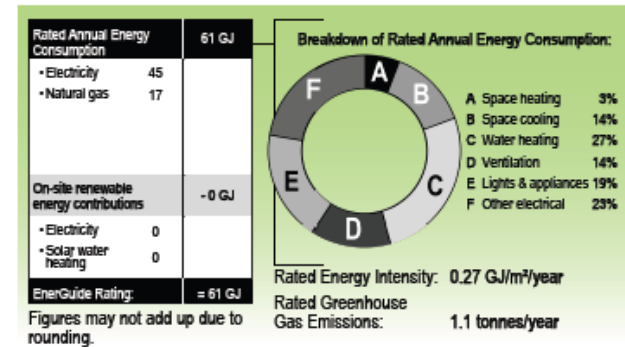
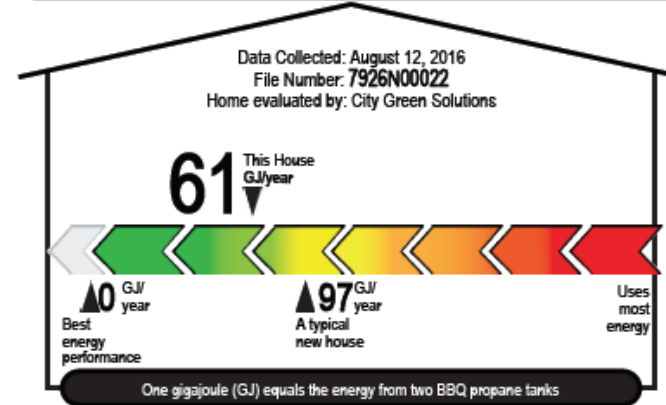
Step Level	Energy Modelling	Airtightness	Equipment and Systems	Envelope
Step 1 Enhanced Compliance (BC Building Code Performance)	Required	3.5 ACH ₅₀	BCBC using 9.36.5. OR ERS v15 ref. house (MEUI of 115 kWh/m ² /year is likely, but not required)	Report on TEDI and PTL (TEDI 75 kWh/m ² /year is likely, but not required)
Step 2 10% Beyond Code	Required	3.0 ACH ₅₀	10% better than ERS v15 ref. house OR MEUI – 100 kWh/m ² /year	TEDI – 70 kWh/m ² /year OR PTL – 55 W/m ²
Step 3 20% Beyond Code	Required	2.5 ACH ₅₀	20% better than ERS v15 ref. house OR MEUI – 85 kWh/m ² /year	TEDI – 60 kWh/m ² /year OR PTL – 50 W/m ²
Step 4 40% Beyond Code	Required	1.5 ACH ₅₀	40% better than ERS v15 ref. house OR MEUI – 55 kWh/m ² /year	TEDI – 50 kWh/m ² /year OR PTL – 45 W/m ²
Step 5 50%+ Beyond Code	Required	1.0 ACH ₅₀	MEUI – 25 kWh/m ² /year (no ERS option)	TEDI – 15 kWh/m ² /year OR PTL – 10 W/m ²

Key points about the new ERS

- Consumption based scale (GJ/yr)
- Reference house is used as a baseline for performance targets
- Step Code, and some other programs, are using ERS v15 reference house as a base metric
- NRCan will complete transition within a year

Note for Step Code:

- Compliance is purely performance pathway – meaning energy modeling is required



The energy consumption indicated on your utility bills may be higher or lower than your EnerGuide rating.

Visit nrcan.gc.ca/myenerguide



Natural Resources
Canada

Resources naturelles
Canada

Canada

Support for the transition

- **Training and capacity:**

- Ministry of Energy and Mines, BC Hydro and BC Housing
- Local Community Energy Manager
- Code compliance software (in development)

** Please share your ideas on specific training needs**

- **East Kootenay Step Code Policy**

- Exploring consistent incentive options for all East Kootenay local governments
- Support transition toward performance pathway
- Training, materials and peer learning
- Supportive industry training



New EnerGuide Rating System

Please contact Chris Frye with any questions on the ERS v15.

chris.frye@gov.bc.ca

250-952-0887

Welcome to Richard Kadulski

Architect – Author – Advisor

NEW HOME PROGRAM – [click here](#)

Community Energy Association
Fernie

November 17, 2016



We're working together to help B.C. save energy.



Site Visit

Next up: Site visit

- Certified Energy Advisor, Ray Smith
- Local builder, Steve Knudsen

**** Please take a quick break, and proceed to the shuttle!****

Thank you!

Megan Lohmann

RDEK Community Energy Manager

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