

Successfully completing the CHBA Net Zero Renovator Training is a requirement for Renovators participating in the CHBA Net Zero Home Labelling Program for Renovations

For more information see the Program Requirements.

Participants of this course are required to have a copy of the CHBA Renovators' Manual to reference the renovation specific Building Science details. The new definitive guide for home renovation in Canada, the Renovators' Manual takes a deep dive into applying building science to renovating for a variety of circumstances. This brand new manual will be available in late 2021 – and is now available for pre-orders at chba.ca/renovatorsmanual.



Overview & Learning Objectives

Are you interested in offering your clients the opportunity to renovate their homes to 'the ultimate in comfort and efficiency'?

In this course participants learn the latest developments on approaches to Net Zero/Ready renovations focused on *ensuring customer comfort and satisfaction*. Attendees will review the Net Zero/Ready design principles, equipment options, emerging technologies, and construction practices and learn to identify effective strategies to renovate existing homes to Net Zero performance levels. This course reflects the advancements in technology and innovations in the Canadian housing industry. By the end of this course, participants will:

- Understand how to assess for ideal candidates for Net Zero Renovations.
- Learn how to work with a CHBA Qualified Net Zero Energy Advisor to achieve the Net Zero Label for a renovation.
- Receive and review reference Net Zero/Ready Home case studies.
- Identify how varying client motivations for pursuing a Net Zero Renovation could result in different approaches.
- Know the history of energy retrofit incentives as well as some of the unintended consequences from those programs.
- Discover how homes were built in different decades and how this impacts a Net Zero Renovation.
- Understand how to determine if an interior or exterior approach is advisable/cost-effective.
- Hear how energy monitors can be used as sales tools with existing homeowners.
- Understand how a small PV array on a Net Zero Ready home can support the renovation and customer goals.
- Learn how to provide preliminary estimates of PV generation prior to engaging experts.
- Meet peer renovators engaged in deep energy renovations.
- Have tools and tips for promoting Net Zero Renovations on social media.
- Learn how to approach the complex safety issue that can occur with existing fireplaces in deep energy retrofits.
- Describe value of homes renovated to Net Zero and new homes built to meet the CHBA Net Zero Home Labelling Program Requirements.

An exam at the end of the course is designed to confirm that participants have learned the key Net Zero Renovation material. A passing grade is 75%.

Pre-Requisites

In addition to this course, completion of the Net Zero Builder Training Course is required in order to obtain the designation of CHBA Qualified Net Zero Energy Advisor. Successfully completing a Building Science training course is a required pre-requisite to the Net Zero Builder Course. Eligible pre-requisite Building Science courses must be delivered based on the concepts within the CHBA Builders' Manual and have an exam to confirm the students understanding of the course learning objectives. It is up to the discretion of the CHBA Qualified Net Zero Service Organization to determine if the prerequisite is met upon a student's registration in the Net Zero Builder Training course

This is an advanced level course. Understanding Building Science and how to achieve Net Zero are necessary foundations for participants to succeed in this course.

Agenda

DAY 1

How Homes were built and renovated in the past

WHAT is a CHBA Net Zero Reno?

- How does a Net Zero reno differ from a Net Zero new home?

ADMINISTRATIVE REQUIREMENTS

- Becoming a CHBA Qualified Net Zero Renovator
- Getting a Net Zero or Net Zero Ready label for your Reno
- Attestations & Quality Assurance

WHERE do I start?

- Planning for a Net Zero Reno: Integrated Design Process
- Finding ideal candidates for a Net Zero Reno
- Energy “budget”, renewable energy generation

HOW to get to Net Zero – Putting it all Together

- Building Envelope:
 - Airtightness
 - Basements & foundation

DAY 2

HOW to get to Net Zero – Putting it all together

- Building Envelope (*continued*):
 - Above grade walls
 - Insulation vs “outsulation”
 - Attics and roofs
 - Windows and doors
- Mechanical Systems
 - Space Heating & Cooling
 - Domestic Hot Water
 - Ventilation and Air Distribution
 - Safely renovating fireplaces

Case Study & lessons learned

Marketing and Selling Net Zero Renos

COURSE EVALUATION AND EXAM

Audience

Successfully completing the CHBA Net Zero Renovator Training is a requirement for Renovators participating in the CHBA Net Zero Home Labelling Program for renovations.

This course is also recommended for designers such as Architectural Technologists, Architects, Engineers, HVAC Designers, as well as Building Officials, and Trades.

Qualified Net Zero Builders and Renovators must have at least one trained person on staff. For Renovators, the person must successfully complete the Net Zero Renovator Training as well as the Net Zero Builder Training, including it's Building Science course pre-requisites.

Any successfully completed Net Zero training is “tied to” the person who took the training, not the organization that they were employed with at the time of training. Should the trained person change employment to a different builder/renovator, they take their training “certificates of completion” with them and the builder/renovator must ensure they have another trained employee on staff.

CHBA Renovator Members can promote themselves as **CHBA Qualified Net Zero Renovators** once they have:

- 1) successfully completed the required training
- 2) become RenoMark™ renovators
- 3) labelled their 1st Reno under the CHBA Net Zero Home Labelling Program
- 4) registered with the CHBA

They will be promoted to homeowners at www.NetZeroHome.com

When / Where / Cost

Only a CHBA Qualified Net Zero Service Organization (SO) can offer this course, delivered by a CHBA Qualified Net Zero Trainer. Training dates, locations, costs and registration links are posted at www.chba.ca/nze.

CHBA Qualified Net Zero Trainers



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Continuing Professional Development (CPD) Points

This course is accredited for 12 CPD points through BC Housing.

Questions?

Contact Brett.Cass@chba.ca.

For more information on the Net Zero Home Labelling Program visit www.chba.ca/nze.

For more information on how the CHBA Net Zero Council is working to remove the barriers to voluntary adoption of Net Zero/Ready Homes visit www.chba.ca/nzc.