

Successfully completing the CHBA Net Zero Energy Advisor Training is a requirement for Energy Advisors participating in the CHBA Net Zero Home Labelling Program.

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 and go to work for a different company, they take their training "certificates of completion" with them. For more information see the Program Requirements.

The products/materials/equipment to achieve Net Zero/Ready are now more widely available across Canada, and more CHBA Qualified Net Zero Energy Advisors are needed to help builders design climate specific packages to address each projects' needs. Become part of the CHBA Qualified Net Zero Energy Advisor network and work directly with the builders and renovators to design, model, test, and verify Net Zero Homes.

Overview & Learning Objectives

Are you interested in offering your builder clients the ability to label homes under the CHBA Net Zero Home Labelling Program?

In this course energy advisors learn the latest developments on approaches to Net Zero/Ready homes with a focus on the best practises used in modelling these homes using HOT2000. Participants will enhance their knowledge of Net Zero/Ready design principles, emerging technologies, construction practices and learn the skills to help their builder clients implement these strategies and meet the requirements of the Net Zero Home Labelling Program. Join us to learn the program modelling procedures and guidelines - which reflects the advancements in technology and innovations in the housing industry. By the end of this course, participants will:

- Understand the history of energy efficiency and Net Zero Energy housing in Canada
- Understand and explain the CHBA definition of Net Zero Energy
- Understand how to become a CHBA Qualified Net Zero Energy Advisor and how to maintain this designation
- Understand requirements for project management, timelines, and integration of verification checklists/blower door tests into construction processes
- Learn how to navigate and administer the CHBA Net Zero Home Labelling Program documents: The Technical Requirements, the Administrative Requirements and the Technical Procedures Guidebook
- Learn how to comply with the CHBA Net Zero Modelling Procedures including the Building Envelope evaluation, as well as the file submission requirements for the Project Registration Workbook
- Understand how to model high performance wall assembly types and complete onsite verification
- Understand how to lead in the integrated design process, collaborating with all project stakeholders involved in Net Zero and Net Zero Ready projects
- Learn how to input solar photovoltaic (PV) values into HOT2000 to get a home to Net Zero
- Identify the effects of glazing on thermal envelope, total building energy efficiency (especially the cooling loads), and occupant comfort
- Identify and model Net Zero HVAC systems

Course Content

DAY 1 & 2

WHAT is Net Zero & why should I care?

- Background and context

ADMINISTRATIVE REQUIREMENTS

- Becoming a CHBA Qualified Net Zero Energy Advisor
- Review & delivery of reference documents
- Attestations & Quality Assurance

PRE-CONSTRUCTION ASSESSMENT

- HOT2000 Modelling Exercise
- Net Zero Design Review
- NRCan's HTAP and CBAT Optimization & Costing Tools

POST-CONSTRUCTION ASSESSMENT

- Program verification procedures
- Net Zero file submission requirement

COURSE EVALUATION AND EXAM

At the conclusion of this course a series three evaluations must be submitted to confirm that participants have learned the key Net Zero and Net Zero Ready home components, and the corresponding modelling requirements. The evaluation submission requirements are as follows:

- 1) **Modelling Exercise HOT2000 file.** This file is created throughout the course with instruction from the course trainer. The modelling exercise file is to be submitted to the course trainer for review at the conclusion of the course.
- 2) **Practical Exam HOT2000 file.** This practical exam file is sent to the student following the course. The student is to complete the HOT2000 file and submit it to the course trainer for grading. The practical exam file is graded as pass/fail.
- 3) **Written Exam.** The written exam is to be completed by the student following the course. A passing grade is 75%.

Audience

Successfully completing the CHBA Net Zero Energy Advisor Training is a requirement for Energy Advisors participating in the CHBA Net Zero Home Labelling Program. Upon successfully completing the course (incl. the modelling exercise and exams), Energy Advisors who are registered to deliver the EnerGuide Rating System (ERS) and ENERGY STAR for New Homes will be eligible to register as a CHBA Qualified Net Zero Energy Advisor.

In addition to new Energy Advisors seeking the CHBA qualification, this course is also the update training required for those Net Zero Energy Advisors already qualified in the program.

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 pre-requisite is met upon a student's registration in the Net Zero Builder Training course.

The Net Zero Builder Training Course is an advanced level course. Understanding Building Science is a necessary foundation for participants to succeed in both the Net Zero Builder Training Course and the Net Zero Energy Advisor Training Course.

Participants of this course are required to have the most recent version of NRCAN's HOT2000 software installed on their computer in advance of the training. Participants shall also be prepared to complete this online interactive course using two computer monitors: one to view the presentation from the Net Zero Trainer, and one to follow along in HOT2000 completing the modelling exercise file.

Energy Advisors who successfully complete the Net Zero training, are registered through NRCAN to deliver EnerGuide Rating System and ENERGY STAR for New Homes, and have registered with the CHBA, can promote themselves as a **CHBA Qualified Net Zero Energy Advisors** and will be included in an industry directory at www.chba.ca/nze.

When / Where / Cost

Only a CHBA Qualified Net Zero Service Organization 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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Questions?

Contact Brett.Cass@chba.ca.

For more information on the Net Zero Home Labelling Program visit www.chba.ca/nze. (The consumer webpage is www.NetZeroHome.com.)

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.

We would like to recognize the following individuals for their contribution to the development of this training:

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