



CHBA NET ZERO COUNCIL **10 YEAR IMPACT REPORT**



2014 to 2024



ABOUT CHBA

Since 1943, the Canadian Home Builders' Association (CHBA) has been "the voice of Canada's residential construction industry." Representing one of the largest industry sectors in Canada, our membership is made up of some 8,500 companies – including home builders, renovators, land developers, trade contractors, product and material manufacturers, building product suppliers, lending institutions, insurance providers, and service professionals.



ABOUT THE NET ZERO COUNCIL

The CHBA established a Net Zero Energy Housing Council in 2014 to guide its efforts in high-performance housing. Members are selected for their demonstrated competence and experience in high-performance housing as well as their knowledge or capability in specialized areas important to advancing Net Zero Homes. With over 60 members, expert staff, and many more contributors, the Council brings together the top industry minds in Canada to advance the voluntary adoption of net zero.

The Net Zero Council (NZC) supports innovation in our industry with the goal of creating a market advantage for CHBA builder and renovator members pursuing Net Zero Energy performance. The Council's work will help to meet the housing aspirations of Canadians and renew Canadian leadership in high performance housing.

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"CHBA members have taken a leading role with the voluntary adoption of the CHBA Net Zero Home Labelling Program, with over 2000 homes labelled to date. These industry leaders have advanced this technology and knowhow, optimized solutions, and continue to strive to deliver even more for Canadians. While so much has been accomplished, there is a lot of work to be done, including innovating to bring down prices so one day everyone can have a Net Zero Home. Our lessons learned from this program are also providing solid and informed feedback back into the building code development system. This is why the efforts of the Net Zero Council are so important. We're excited to be able to continue to advance our industry through delivering CHBA's existing Net Zero training courses at scale. A huge thank you to our members who are leading the industry, which in turn is benefiting Canadians."



KEVIN LEE, P.Eng., M.Arch.

Chief Executive Officer
613-230-3060 x222 | kevin.lee@chba.ca



"Climate change, the continued housing affordability crisis, and the pandemic have made it clear that healthy, safe, energy efficient, and affordable homes are more important than ever. Concerns around home indoor air quality, comfort and energy costs have been raised continuously over the years, and GHG emissions and resilience are now on the horizon. The CHBA Net Zero Council, its Management Committee, Technical Committee, Working Groups and Advisory Groups provide leadership and guidance so that the Net Zero Council can address these challenges and opportunities. The peer-to-peer information and knowledge sharing has proven to be the key to success for the Net Zero Home Labelling Program to be an effective and scalable voluntary solution for the industry. Learn more about our efforts to remove the barriers for voluntary adoption to Net Zero and Net Zero Ready Homes, our results, and the people leading the charge in the Net Zero Council's 10 Year Impact Report."



SONJA WINKELMANN, EP

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MEET THE NET ZERO TEAM



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**Past Net Zero staff who contributed to the success of the NZC include:
Marvin Gorospe, Marie Hanchet, and Ejaz Hussain Farook.**

MANDATE AND KEY PRIORITIES

In 2014 when the Net Zero Council was established, the mandate was developed and, to address the barriers to market adoption, four key priorities were identified. Using this foundation, the NZC Management Committee met in 2019 to develop a formal Strategic Plan, providing further clarity on the core purpose and values, actions, key capabilities, 3 Year Highly Achievable Goal (3HAG) and 10 Year Big Hairy Audacious Goal (BHAG).

The Management Committee continues to meet every three years to review and update the strategic plan and set targets with the Net Zero Staff. Working towards achieving these, the staff has monthly, quarterly and annual meetings to review progress.

The complete 2024-2026 NZC Strategic Plan can be found at chba.ca/NZC.

MANDATE

In alignment with the CHBA Strategic Priority to advance innovation, the mandate of this self-funding ad-hoc Council is to deliver services that will support members' voluntary adoption of Net Zero Housing. The NZC will:

- gather intelligence on member and consumer needs to inform priorities and influence strategic advancements,
- build awareness and knowledge through the consolidation and sharing of information utilizing a variety of channels and forums, and
- implement activities to identify barriers, find solutions, transfer knowledge, inform policy, accelerate action, and increase efficiencies.



KEY PRIORITIES

A LABELLING PROGRAM to distinguish and recognize Net Zero and Net Zero Ready Homes (detached, attached, and MURBs), Renovations, and Neighbourhoods, and the participating builders/renovators - focused on both energy efficiency and emissions reductions. To support industry adoption of this voluntary program, the following efforts will be delivered:

- **Technical & Administrative Requirements** that support market preparedness for the implementation and compliance of the highest feasible tiered energy codes, and for operational and embodied emissions planned for the 2025 and 2030 codes.
- **Educational Initiatives** to bridge the knowledge gap, support cost-optimization, and accelerate the industry's capacity to capitalize on Net Zero, such as training (which utilizes the CHBA manuals), webinars, and the Net Zero Leadership Summit.
- **Marketing & Communications Initiatives** to strengthen the Net Zero Home Labelling Program brand, build awareness and understanding of the value of CHBA Net Zero Homes, and stimulate market demand.
- **Financing Solutions** using program information/ data to inform the development of innovative and effective financing mechanisms by key industry players to address the initial cost, helping accelerate voluntary adoption of Net Zero/Ready Homes.

APPLIED RESEARCH, DEVELOPMENT, AND DEMONSTRATION (RD&D) INITIATIVES (including LEEP field trials) working with industry leaders to identify and prioritize barriers and seek innovative solutions for cost-effective Net Zero levels of performance focused on both energy efficiency and emissions reductions for all housing forms, including multi-family and renovations, and for neighbourhoods. Initiatives support energy efficient construction by enabling builders and renovators to reduce their time and risk identifying, exploring, and adopting innovations in the residential construction industry. Efforts contribute to and leverage CHBA RD&D work in Climate Change Mitigation, Adaptation and Resilience guidelines and standards.

3HAG: 3 YEAR HIGHLY ACHIEVABLE GOAL (TO END OF 2026)

Expand the labelling program to include an option for operational and embodied emissions reductions.

- Develop a Net Zero Operational Emissions option by 2025.
- Develop a Net Zero Embodied Emissions option by 2028.

RENOS: A Net Zero Reno Roadmap including ROPs (Renovator Option Packages).

BHAG: 10 YEAR BIG HAIRY AUDACIOUS GOAL (TO END OF 2033)

Qualified Net Zero Builders can build Net Zero/Ready for zero additional total cost of ownership compared to a Tier 1 2023 home.

RENOS: A network of Qualified Net Zero Renovators that are renovating homes to Net Zero/Ready levels of performance across the country.

LEADING THE EFFORT

The CHBA Net Zero Council held its first meeting in October 2014 with 50 voting members. Over the years, the interest from industry leaders encouraged the growth of the Council, which added 10 seats in 2018 and another 5 seats in 2021. Members are selected for their demonstrated competence and experience in Net Zero, R-2000 or Energy Star housing as well as their knowledge or capability in specialized areas important to the advancement of Net Zero Housing.

To ensure cross-pollination with other CHBA Councils and Committees, Ex-Officio Reciprocal Members from the CHBA Executive Committee, Technical Research Committee (TRC), Canadian Renovators' Council (CRC), and Modular Construction Council (MOD) also sit on the NZC. And with strong collaborative efforts from other key industry stakeholders, the NZC includes seats for Ex-Officio Members from NRCan OEE, NRCan CanmetENERGY, NRCan CanmetENERGY LEEP, NRC, CMHC, the Canadian Forces Housing Agency, and the Canadian Association of Consulting Energy Advisors.

Council Members meet twice annually and are invited to participate in exclusive Net Zero Networking and Exchange events occurring in conjunction with the bi-annual meetings. This peer-to-peer networking and knowledge for members, assists in shortening their learning curve.

You can find the complete list of current members in the directory.

Proud Member of:

**Canadian
Home Builders'
Association**



Net Zero Council

The CHBA Net Zero Council (NZC) supports innovation in our industry with the goal of creating a market advantage for CHBA builder and renovator members who choose to pursue. This will not only help to meet the housing aspirations of Canadians but renew Canadian world leadership in high performance housing.

To learn more about membership and how to apply, visit chba.ca/nzc.

2023/2024 NZC MANAGEMENT COMMITTEE

In addition to their demonstrated competence and experience in Net Zero, R-2000 or Energy Star housing as well as their knowledge or capability in specialized areas important to the advancement of Net Zero Energy Housing, the 10 members of the NZC Management Committee (MC) are selected for their desire and ability to play a stronger leadership role on the Council.

The MC has been meeting monthly to discuss key priorities including providing guidance to the Technical Committee, participating in an annual planning meeting and Strategic Planning every 3 years, provides feedback on the agendas for the Spring and Fall NZC Meetings, as well as for the Net Zero Leadership Summit. This group of CHBA member volunteers is dedicated to the success of the Council and they go above and beyond the average volunteer.



CHRIS WILLIAMS, CHAIR (2021-2024)

Vice President,
Avalon Master Builder



MATTHEW BROWN, VICE CHAIR

Director, Product Development,
Minto Communities - Canada



ARTHUR LO, 2ND VICE CHAIR

Founder & Owner,
Insightful Healthy Homes



ANDY ODING, PAST CHAIR (2014-2017)

Vice President,
Building Knowledge Canada



BOB DEEKS, PAST CHAIR (2017-2019)

President,
RDC Fine Homes



PETER AMERONGEN

Managing Partner,
Butterwick Construction & Carpentry



DOUG TARRY

President,
Doug Tarry Homes



HAITAO YU

Research & Development Lead,
Landmark Group of Companies



PHILLIP SANTANA

Director, Sustainability,
Mattamy Homes Canada



PETER DARLINGTON

President,
Solar Homes

2023/2024 NZC SPONSOR MEMBERS

CHBA's Net Zero Council is self funded and generates operating revenue through Membership and Sponsorship fees. The council supports innovation in our industry with the goal of creating a market advantage for CHBA builder and renovator members who choose to pursue Net Zero. Sponsors of the Council share a commitment to innovation and high-performance housing solutions. They bring significant knowledge or capabilities to the Council in specialized areas important to the advancement of Net Zero housing.

Learn more about our Gold and Silver Sponsor Members below and at chba.ca/nzc.

GOLD SPONSOR - OWENS CORNING CANADA



Owens Corning has been the Gold Sponsor of the Net Zero Council since its inception. The support and dedication of the Owens Corning team has been a key part of the Council's success. We are grateful for their vision and commitment to the Net Zero Council and its efforts.

Owens Corning is a global leader in insulation, roofing, and fiberglass composite materials. Its insulation products conserve energy and improve acoustics, fire resistance, and air quality in the spaces where people live, work, and play. Its roofing products and systems enhance curb appeal and protect homes and commercial buildings alike. Its fiberglass composites make thousands of products lighter, stronger, and more durable. Owens Corning provides innovative products and solutions that deliver a material difference to its customers and, ultimately, make the world a better place. The business is global in scope, with operations in 33 countries. It is also human in scale, with 20,000 employees cultivating local and longstanding relationships with customers.

For more information, please visit: owenscorning.com.

INTERESTED IN BECOMING A SPONSOR MEMBER OF THE NET ZERO COUNCIL?

Sponsor members of the Council share a commitment to innovation and high-performance housing solutions and bring significant knowledge or capabilities to the Council in specialized areas important to the advancement of Net Zero housing.

If Net Zero housing and the leadership provided by the Council are a strategic fit for your company, CHBA invites you to become a Council sponsor. This is an opportunity to visibly demonstrate commitment to, and support for the industry's advancement of innovation in high-performance housing across Canada. Learn more at chba.ca/nzc.



SILVER SPONSORS

For more information, please visit:



www.allweatherwindows.com



Heating and Cooling

www.mitsubishielectric.com



www.enbridge.com



www.panasonic.com



www.fortisbc.com



www.reliancebuilderprogram.com

BRONZE SPONSORS



THANK YOU FOR ALL THE SUPPORT!

LABELLING PROGRAM

The CHBA Net Zero Home Labelling Program started with a pilot in 2015 and has labelled over 2,100 homes in Canada to-date. The Program provides the industry and consumers with a clearly defined and rigorous two-tiered technical requirements that recognize Net Zero and Net Zero Ready Homes, and the builders and renovators who provide them.

A national network of CHBA Qualified Net Zero Service Organizations and Energy Advisors (who work directly with the builders and renovators to design, model, test and inspect each home), as well as CHBA Qualified Net Zero Trainers (who deliver the Net Zero training courses), are a key component to the success of the Program.

Find a list of Qualified Participants in the directory.



Detached: 1,367



Attached: 712



MURB Units: 108
(within 10 buildings)



Renovation: 11

(as of Oct 1, 2024)

OVER 2100 LABELLED HOMES!

Being part of the CHBA Net Zero Home Labelling Program provides credibility and instills industry and homebuyer confidence. It shows that your homes adhere to the requirements of an industry leading voluntary program, demonstrating that you're ahead of the curve and a leader among builders, renovators and energy advisors. Become a CHBA Qualified Net Zero Professional and equip yourself with the skills needed to lead in residential Net Zero construction and renovations. ***Learn more about these opportunities and more at chba.ca/nze.***

PROGRAM HIGHLIGHTS

- July 2016 1st Net Zero Home labelled under CHBA Net Zero Energy Pilot Program.
- May 2017 CHBA launches first version of the Net Zero Home Labelling Program.
- July 2020 1st Net Zero Renovation labelled under Net Zero Renovations Pilot Program.
- October 2021 CHBA launches Net Zero Home Labelling Program for renovations.
- August 2022 1,000 homes labelled under the CHBA Net Zero Home Labelling Program.
- November 2023 Doug Tarry Homes labels their 500th Net Zero Ready Home.
- January 2023 IAQ Checklist as part of the Net Zero Home Labelling Program is launched.
- April 2024 Net Zero Ready Alternative Compliance Path launched.
- August 2024 2,000 homes labelled under the CHBA Net Zero Home Labelling Program.

PROGRAM SUMMARY REPORTS

Each year we provide summary reports to our members to provide an up-to-date analysis of the Net Zero Home Labelling Program. The reports evaluate the most current trends in Net Zero Housing, and share information about the construction assemblies, technologies, and performance of the homes. **Download the reports at chba.ca/program-summary-reports.**

NET ZERO READY ALTERNATIVE COMPLIANCE PATH

In April 2024, CHBA's Net Zero Home Labelling Program introduced an Alternative Compliance Path for Net Zero Ready Homes. The new compliance path addresses the challenge often faced by smaller housing types, to provide enough renewable energy generation on-site, and outlines specific technical requirements and submission procedures.

This research was made possible by funding from:  **BC HOUSING**

NET ZERO TECHNICAL COMMITTEE

The role of the Net Zero Technical Committee (TC) is to assist the CHBA Net Zero Housing Council (NZC) in an advisory capacity to review, consider and make recommendations on the development and implementation of the Net Zero Home Labelling Program. The TC holds monthly meetings to support the ongoing development of the Program Requirements.

The Net Zero Technical Committee is made up of 14 industry expert voting members from across Canada. **Learn more at chba.ca/net-zero-technical-committee.**

ANGELA BUSTAMANTE, CHAIR

Director of Technical Services
and Builder Services,
Building Knowledge Canada

DEREK SATNIK, PAST CHAIR

VP of Technologies,
s2e Technologies Developments

GARY HAMER, PAST CHAIR

Residential Specialist Engineer,
BC Hydro

AMELIE CARON

Founder & Owner,
Ecosynergy Inc.

ARTHUR LO

Founder & Owner,
Insightful Healthy Homes

HAITAO YU

Research & Development Lead,
Landmark Group of Companies

LUKE DOLAN

CEO & Sr. Energy Advisor,
Capital Home Energy

MATT CABLE

Manager Sustain Products,
Enbridge Sustain

MARK LINDENBACH

Net Zero Compliance Manager,
Avalon Master Builder

PETER DARLINGTON

President,
Solar Homes

RON ISAAC

Director, Sustainability,
Empire Communities

SALVATORE CIARLO

Technical Services and Codes and Standards Director,
Owens Corning Canada

STEPHEN MAGNERON

Ontario Manager,
Homesol Building Solutions

WIL BEARDMORE

President,
Blewater Energy

EDUCATION INITIATIVES

To bridge the knowledge gap and accelerate the industry's capacity to voluntarily capitalize on Net Zero, various educational efforts have been undertaken to build competency on Net Zero Homes.

NET ZERO TRAINING COURSES

When the Net Zero Home Labelling Program was launched in 2017, CHBA started with a two-day Net Zero Builder Training course which included a full day of advanced Building Science content. Over the course of the first couple years, CHBA received feedback from students that the Building Science content was not required as most students had already taken it. So, it was decided to “decouple” it, the training was made into a 1-day Building Science prerequisite (for those who had not yet taken that course) to the 1-day Net Zero Builder Training course.

Over the past few years more training was developed, and CHBA now offers the following courses for the Net Zero Home Labelling Program:

- Net Zero Builder Training
- Net Zero Renovator Training
- Net Zero Energy Advisor Training
- Net Zero Sales Training, with an additional video “module” on marketing & communications

Content for a **Net Zero Trades Training** course and **Net Zero Building Officials Training** course has been developed. The Net Zero Building Officials Training course will be delivered 100% asynchronously via the CHBA Learning Management System (being piloted in the Fall of 2024) and the Net Zero Trades Training course (as well as a **Building Science Training** course also being piloted in the Fall of 2024) will be delivered via a hybrid model, with some instructor-led training and some asynchronous learning.

2500+

**PEOPLE TRAINED ON
NET ZERO ACROSS
CANADA TO-DATE!**

The CHBA Net Zero training courses are delivered through CHBA Qualified Net Zero Service Organizations, delivered by CHBA Qualified Net Zero Trainers. Successfully completing training is required to become a CHBA Qualified Net Zero Builder, Renovator or Energy Advisor.

Find upcoming training dates and the course syllabuses at chba.ca/nztraining.



CHBA Members can access past webinar recordings and slide decks on demand.

[CHBA.CA/NZWEBINARS](https://chba.ca/nzwebinars)

**THERE ARE
OVER 45
AVAILABLE!**

NET ZERO LEADERSHIP SUMMITS

As the Net Zero programming was developed, starting with net zero energy and more recently evolving to include operational GHGs, embodied GHGs and resilience, it has been key to engage the industry leaders.

Focused on valuable content and participant engagement, the Net Zero Leadership Summits have convened leaders in the industry such as builders, renovators, energy advisors, product manufacturers, service providers, utilities, developers, as well as government, and academia from across Canada.

These events have been designed so that participants gain insight and explore innovative, industry-leading efforts, and are part of the dialogue, interacting and providing input and feedback during each session to work through the opportunities and challenges.

In addition to a Net Zero Builder Boot Camp held in 2016, and a “mash up” of the Net Zero Leadership Summit with the Advanced Building Science Spring Training Camp in 2023, our 2020 & 2024 in-person and 2021 virtual Summits have brought together over 800 industry leaders, for 45 sessions and 20 open mic presentations, as well as 22 emerging innovation videos, and 39 demo hub exhibitors.



LEEP

LOCAL ENERGY
EFFICIENCY
PARTNERSHIPS

INTO LEARNING

Initiated by Natural Resources Canada (NRCan) in 2007, and supported by CHBA for more than a decade, CHBA has been working directly with NRCan to scale the LEEP initiative since 2021.

The Local Energy Efficiency Partnership (LEEP) initiative has been at the forefront of transforming energy-efficient construction. By streamlining the process for builders and renovators to discover and implement innovative technologies, LEEP enables them to construct higher-performance homes more quickly and affordably.

LEEP's builder/renovator-driven model has proven to be effective in accelerating the adoption of technologies; **reducing builders' and renovators' time and risk identifying, exploring, and adopting innovations.** LEEP is delivered regionally with the intention to establish an ongoing critical mass of builders and renovators that can identify the best innovations suited to their region which can, in turn, pull through a responsive supply chain.

Initially developed by NRCan, CHBA has had exceptional success in accelerating adoption of emerging technologies, by supporting **over 2000 attendees** through **57 workshops** since 2021 with the help of **over 45 SMEs** and **over 10 manufacturers**, presenting **over 25 workshop topics and tools** to markets **across Canada.**

Listening to the needs expressed by builder and renovator members and national councils and committees, LEEP fosters collaboration to achieve higher levels of energy performance. In the years to come, this will support the effective adoption of the tiered energy codes, as well as the coming operational and embodied emissions, and resilience requirements.

LEEP ADVISORY COMMITTEE

- **Chair & MOD Rep:** Simarjit Bains, Triple M Housing,
- **TRC Rep:** Grant Cooper, Cooper Custom Homes
- **CRC Rep:** Curtis Mercer, K&P Contracting
- **NZC Rep:** Derek Satnik, S2E Technologies Developments
- **EA West Rep:** Tyler Hermanson, 4 Elements Integrated Design
- **EA Central Rep:** Andy Oding, Building Knowledge Canada
- **EA East Rep:** Lauren Lipka, CHBA-NB

BUILDERS & RENOVATORS

- Bob Deeks, RDC Fine Homes
- Brad McLaughlin, MCL Construction
- Dale Verville, Broadview Homes
- Errol Fisher, North Ridge Development Corporation
- John Corvinelli, Corvinelli Homes
- Keith Jansen, Lincolnberg
- Louis Orazem, Inspire Homes
- Peder Madsen, CCR Build + Remodel

MORE INFO AT [CHBA.CA/LEEP](https://chba.ca/leep)



IMPACT SNAPSHOT



**LEEP IS
17 YEARS OLD**



**LEEP OPERATES
IN 9 PROVINCES**



**OVER 2100 ATTENDEES
SINCE 2021**



CHBA LEEP TIMELINE

Year 1:
Project Kick Off



Year 3:
Gaining Momentum



Year 2:
Building The Foundation



Year 4:
Broadscale Delivery

BUILDER TESTIMONIALS

DOUG TARRY, PRESIDENT

Doug Tarry Homes, St. Thomas, ON

We began our involvement with the London Energy Efficiency Partnership (LEEP) and have since been actively engaged in a variety of sessions. Our deep involvement has been instrumental in our journey, which I refer to as the “Path to Continuous Improvement.” Through various LEEP iterations, we have been able to stay aligned with current discussions, make necessary adjustments, and enhance our practices. This process has provided us with valuable insights by allowing us to engage with technology experts and evaluate manufacturers’ products with a well-rounded knowledge base.

We’ve learned through time that while challenges are inevitable, managing change incrementally is far more effective than attempting to make numerous changes at once. By focusing on one or two aspects at a time, we can more easily identify and address issues that arise. LEEP helps us do that.

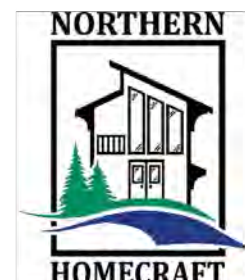


SHAY BULMER, PRINCIPAL OWNER

Northern Homecraft Ltd., Vanderhoof, BC

Our journey with LEEP led to our first CHBA Net Zero Ready Home in 2018, which won a Georgie Award. LEEP connected us with essential industry specialists, such as solar and mechanical designers, who provided invaluable resources for building science and material supply. We are strong advocates of the Integrated Design Process (IDP) and have tailored it to suit our remote location. Our IDP team ensures that all stakeholders share a unified vision, which has proven crucial for uncovering important details that might otherwise be missed.

We’ve learned that early collaboration is key to reducing costs, stress, and achieving project goals. The IDP is flexible and can be scaled to fit any project’s budget, including smaller, budget-conscious builds. Our success with both large and modest high-performance projects underscores our commitment to excellence and innovation in the field.



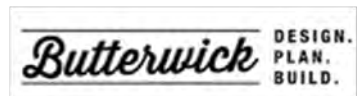
RENOVATOR TESTIMONIALS

DAVID BUTTERWICK, MANAGING PARTNER

Butterwick Construction & Carpentry Ltd., Edmonton, AB

While we have not yet participated in a LEEP session, we typically do use a form of IDP. It helps us move through the design process using what we know works and it's easier to solve the problems we need to solve on individual projects.

We're always learning and on a path of constant improvement. There seems to be innovation in every new project we start but that's how we got here so we like to keep that as an important part of what we do. It's got us to a point where Net Zero and Passive House is all we build now. It's become the spec that we start at. We've completed some amazing projects and have some exciting ones lined up. I attribute this to our team; we have such a great group of people willing to work together. The environment is always unique, and our group appreciates that.



PEDER MADSEN, OWNER

CCR Build + Remodel Inc., London, ON

I participated in both the LEEP for Retrofit and the LEEP for Mechanicals sessions in London. Although I was aware of many products and practices we covered, there were new lines of thinking introduced. With these all being packaged in one comprehensive meeting of the minds; I was able to better understand and incorporate them into my building knowledge. It was especially great having the different manufacturer representatives there as we discussed the challenges and opportunities of each system. The mechanicals discussion opened my eyes to some new lines of thinking. Using all that I learned in those sessions, it sped up my ability to navigate my first Net Zero Renovation. It also gave me contact information for those who ultimately helped bring it all together.

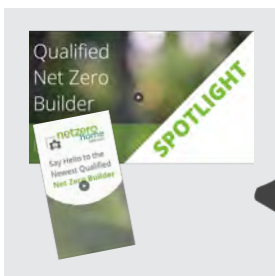


The biggest lesson I learned is that this is very possible and not as challenging as I initially thought. The first one takes time as you train a high-performance team and learn the process to model and label your home, though it is highly rewarding and makes future projects much easier. My next task is to take this as a pilot to show our clients the advantages of going with a Net Zero Build or Remodel. Key word? "Cozy."

MARKETING & COMMUNICATIONS

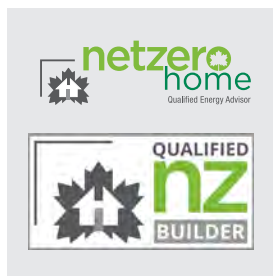
To develop the Net Zero brand, build awareness and understanding of the value of Net Zero Homes, and stimulate market demand, various marketing and communications efforts have been undertaken. These efforts include spotlighting the qualified Net Zero participants on social media, as well as in online directories (for consumers and for industry members to find them) and providing hardhat stickers, bumper stickers and window decals. Additionally, optional Net Zero/Ready plaques are used to recognize these homes, and monthly newsletters, blogs, yearly Net Zero home awards and videos provide ongoing updates and insights.

Qualified Net Zero Builders Online Promotion



Shared on social media channels weekly

Qualified Net Zero Participant Logo, Stickers & Email Signature Icons



Print and digital version available + Resource library

Hard Copy Marketing Materials + Resources

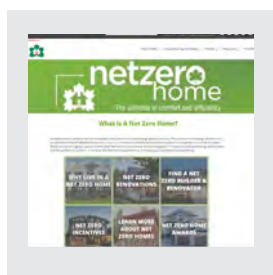


Net Zero Social Media Channels

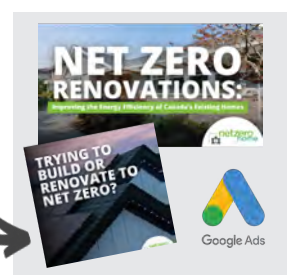


Including LinkedIn articles + Over 6800 followers across all channels

Website

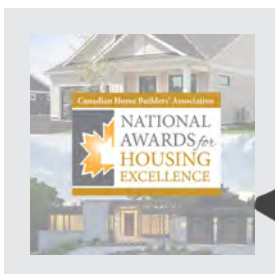


Digital Advertising



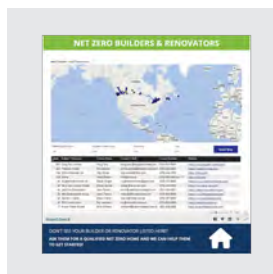
Over 3 million impressions in 2024

Net Zero Home Awards

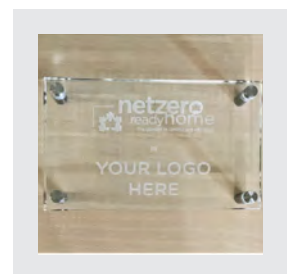


2 Categories: Production + Custom/ Renovation

Builder / Renovator Map Directory



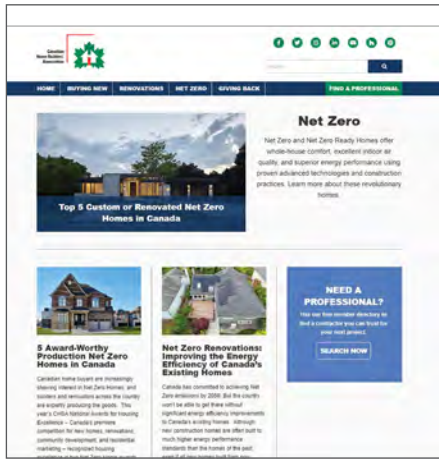
Net Zero / Ready Plaques



For indoor and outdoor use

SHAREABLE VIDEOS ON

CHBA's "Net Zero Homes in Canada" YouTube playlist features a range of informative videos that highlight the benefits and technologies behind Net Zero Homes, showcasing industry experts and successful projects.



SHARABLE CONSUMER BLOG POSTS

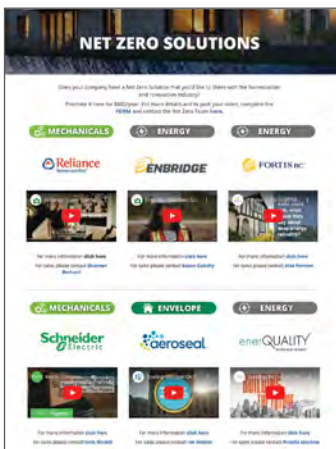
The Net Zero blogs posted on the CHBA website offer in-depth articles on the latest trends, technologies, and benefits associated with Net Zero Homes. These blogs provide valuable insights from industry experts, practical advice for homeowners, and updates on advancements in sustainable building practices. They serve as a resource for staying informed and engaged with the Net Zero movement.

blog.chba.ca/category/net-zero

24+
BLOG POSTS

NET ZERO NEWS

The monthly Net Zero newsletter delivers the latest updates, trends, and insights related to Net Zero Homes, including up-to-date training opportunities, industry events, and top stories. It features highlights from recent projects, expert opinions, and practical tips for those interested in sustainable living. To join the mailing list and stay informed, contact netzero@chba.ca.



NET ZERO SOLUTIONS VIDEOS

NEW! On the CHBA website, the Net Zero Solutions page offers valuable insights through videos created by industry leaders, providing practical advice and innovative solutions. **Those interested in contributing their own videos can submit their content by contacting netzero@chba.ca.**

NET ZERO HOME AWARDS

These homes are Qualified under the CHBA Net Zero Labelling Program (either Net Zero or Net Zero ready). These awards recognize excellence in high performance homes that have an appealing aesthetic, including overall exterior and interior design, use of building forms and materials, creative use of space, and functionality of floor plan. In 2022 this award was split into two categories: Best Custom or Renovated Net Zero Home, and Best Production Net Zero Home.

2024 WINNERS



**BEST PRODUCTION
NET ZERO HOME**

Minto Communities, Markham, ON,
"Union Village"

RND Construction Ltd., Ottawa, ON,
"Quarry Park Modern"



**BEST CUSTOM OR
RENOVATED
NET ZERO HOME**

2023 WINNERS



**BEST PRODUCTION
NET ZERO HOME**

Terre View Custom Homes Ltd., Guelph, ON,
"The Avonlea Elevation C, model home at Hart Village"

Chatsworth Fine Homes, Oakville, ON,
"West Oakville Lakeshore Net Zero"



**BEST CUSTOM OR
RENOVATED
NET ZERO HOME**

2022 WINNERS



**BEST PRODUCTION
NET ZERO HOME**

Minto Communities, Ottawa, ON,
"The Caraway"

Naikoon Contracting Ltd., North Vancouver, BC,
"White Rock Net Zero"



**BEST CUSTOM OR
RENOVATED
NET ZERO HOME**

2021 WINNER

Hasler Homes Ltd.
Vancouver, BC
"Linda Vista"



2020 WINNER

Minto Communities Inc.
Ottawa, ON
"The Hampton"

2019 WINNER

Timberworx Custom Homes
Aberfoyle, ON
"Avant Garde"



2018 WINNER

Falcon Heights Contracting Ltd.
Victoria, BC
"Synergy"

2017 WINNER

Doug Tarry Homes
St. Thomas, ON
"The Northgate Net Zero Home"



For more information about the CHBA National Awards for Housing Excellence:
chba.ca/housingawards

CHBA NATIONWIDE HOME BUYER PREFERENCE SURVEY

“Our National Home Buyer Preference Survey confirms that consumers want and expect an energy efficient home. Our members have a long history in delivering high-performance homes and are ready and eager to deliver the next generation of high-performance housing to discerning Canadian home buyers. Our Net Zero Home Labelling Program provides third party confirmation for both the industry and the consumer.”

– Kevin Lee, CEO, Canadian Home Builders’ Association

Canadians want their homes to be as tough as they are; to be able to endure Canadian winters with ease! CHBA members will meet the housing aspirations of Canadians and renew Canadian leadership in high performance housing by offering consumers a “made in Canada” solution: Net Zero Homes!



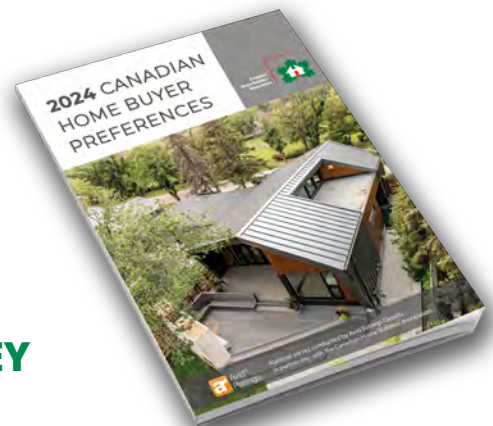
ABOUT THE 2024 SURVEY

Want to know what home buyers are looking for in a new home? What features they are willing to trade-off to get what they want? And what they’re willing to pay? If you’re looking for powerful insight into today’s new home buyer market, then CHBA’s nationwide market research study – powered by Avid Ratings Canada – is a must-read.

- The survey, which is entering its tenth year, is powered by Avid Ratings Canada
- Last year, 18,593 homebuyers across 6 provinces were surveyed
- Over the nine years of the study to-date, a total of 188,000 new homebuyers have been invited to participate
- Consumers were surveyed on more than 50 in-depth areas of home design, building features, buying preferences, and demographics – all included in the report

The 2024 full survey results are **free for CHBA members and HBAs** – a \$495 value. The report summary is a PDF document, and on page 3 of the PDF report, there is a link for you to access the full set of data via Microsoft Power BI – where you’ll be able to filter the data based on a variety of geographic and demographic criteria.

LEARN MORE AT [CHBA.CA/BUYERSURVEY](https://chba.ca/buyersurvey)



TOP 10 OVERALL “MUST HAVE” HOME FEATURES IDENTIFIED BY SURVEY PARTICIPANTS

“Energy efficient appliances,” “Overall energy efficient home,” and “High-efficiency windows” have consistently ranked in the top 6 each year of the survey. “HRV/ERV Air Exchange System” has made the list every year except the first year, and “Certification by a designated program” made it to the top ten in 2018.

2024

1. Walk-In Closets (Primary Suite)
2. Kitchen Island
3. High-Efficiency Windows
4. Walk-In Closets (Interior Of Home)
5. Energy-Efficient Appliances
6. Overall Energy-Efficient Home
7. HRV/ERV Air Exchange System
8. Linen Closets
9. Kitchen: Hardwood / Wood-Look Floor
10. 2-Car Garage

2023

1. Walk-in closets (primary)
2. Kitchen Island
3. Energy-efficient appliances
4. Overall energy-efficient home
5. High-efficiency windows
6. Walk-in closets
7. Two car garage
8. HRV/ERV Air Exchange System
9. Linen closets
10. Open-concept kitchen

2021

1. High-efficiency windows
2. Energy efficient appliances
3. Overall energy efficient home
4. Walk-in closets
5. Kitchen islands
6. HRV/ERV Air Exchange System
7. Open concept kitchens
8. Linen closets
9. Two car garage
10. Large windows

2020

1. Energy efficient appliances
2. Walk-in closets
3. Overall energy efficient home
4. High-efficiency windows
5. Kitchen islands
6. Open concept kitchens
7. Large windows
8. Linen closets
9. HRV/ERV Air Exchange System
10. Two car garage

2019

1. Walk-in closets
2. Energy efficient appliances
3. High-efficiency windows
4. Overall energy efficient home
5. Kitchen islands
6. Open concept kitchens
7. Linen closets
8. HRV/ERV Air Exchange System
9. Large windows
10. Two car garage

2018

1. Walk-in closets
2. High-efficiency windows
3. Energy efficient appliances
4. Overall energy efficient home
5. Kitchen islands
6. Linen closets
7. Open concept kitchens
8. Large windows
9. HRV/ERV Air Exchange System
10. Certification by a designated program

2017

1. Walk-in closets
2. Energy efficient appliances
3. High-efficiency windows
4. Linen closets
5. Overall energy efficient home
6. Kitchen islands
7. Open concept kitchens
8. Large windows
9. Two car garage
10. HRV/ERV Air Exchange System

2016

1. Walk-in closets
2. Energy efficient appliances
3. High-efficiency windows
4. Overall energy efficient home
5. Kitchen islands
6. Linen closets
7. Open concept kitchens
8. Two car garage
9. Large windows
10. HRV/ERV Air Exchange System

2015

1. Walk-in closets
2. Energy efficient appliances
3. Overall energy efficient home
4. High-efficiency windows
5. Kitchen islands
6. Linen closets
7. Open concept kitchens
8. Large windows
9. Two car garage
10. Walk-in pantry

INVESTMENT IN APPLIED RD&D INITIATIVES TO SUPPORT INNOVATION

Applied Research, Development, and Demonstration (RD&D) initiatives (including LEEP field trials) support advancements in residential construction and renovations by enabling builders and renovators to reduce their time and risk identifying, exploring, and adopting innovations.

Working with industry leaders, CHBA identifies and prioritizes barriers and seeks innovative solutions for cost-effective Net Zero levels of performance focused on energy efficiency (and recently, also GHG emissions reductions and resilience) for all housing forms, including multi-family and renovations.

The funding allows CHBA to work with industry leaders to trial advanced construction and renovation methods and technologies. It has also been instrumental in enabling financial support for the optimization and evaluation of the projects, and for sharing the lessons learned, which are then embedded into the Net Zero Home Labelling Program and its associated educational and marketing initiatives.

The confirmed funding on the projects listed below is an approximate equivalent of 145,770 person hours. This represents a significant investment in innovation by the project funders, CHBA staff and industry consultants, as well as the in-kind contributions of CHBA's member volunteers.

- Towards Net Zero Energy Initiative (2015-2016)
- Net Zero Home Labelling Program Industry Training (2017-2025)
- Strategies for Net Zero Energy Ready Homes - Lessons Learned (2018-2019)
- Readiness to Code Energy Tiers - Market & Metrics Review (2019-2021)
- Net Zero Ready Alternative Compliance for Mid-Density Housing Forms (2020-2023)
- Getting to Net Zero Renovations (2019-2021)
- Affordable, Replicable & Marketable Net Zero MURBs (2019-2024)
- Towards Cost-Effective Net-Zero Energy Ready Residential Renovations (2021-2026)
- LEEP - Accelerating Uptake of Innovative Technologies in the New and Retrofit Housing Sectors (2021-2025)
- Post COVID-19 Costing Data for Residential New Construction (2022-2023)
- Enabling Tiered Codes Implementation and Market Preparedness (2024-2027)

Learn more about our applied RD&D initiatives at chba.ca/nze.



AFFORDABLE, REPLICABLE AND MARKETABLE NET ZERO READY MULTI-UNIT RESIDENTIAL BUILDINGS (MURBS)

CHBA is proud to showcase the leadership of our residential home builders, leading the way for high-performance homes for Canadians. The Affordable, Replicable and Marketable Net Zero Ready MURBs project has pushed the industry to better construction outcomes – showing that high-performance homes are achievable within the housing market.

Funded through the Next Generation Clean Energy Infrastructure Program, Natural Resources Canada (NRCan), the objective of this initiative was to validate the use of pre-fabrication (panelization and modular construction) and integrated mechanical system technologies, design and practices in new construction of Net Zero Energy Ready and Net Zero Energy multi-unit residential buildings (MURBs) to optimize energy efficient performance, increase construction productivity, shorten construction schedules, and reduce costs.

This initiative kicked off in 2019 with seven builders and wrapped up in September 2024 with the final ribbon cutting event for the last build. Five builders were able to complete their projects supported through this initiative.

As a concurrent Research, Development & Demonstration goal, the participating teams helped to define the challenges and solutions specific to adapting our CHBA Net Zero Home Labelling Program requirements to a multi-family archetype.

In addition to the construction and analysis of the builds, supporting studies were undertaken with respect to compartmentalization and airtightness, electrification and electrical loads, impacts of Net Zero construction on reducing carbon impacts as well as detailed studies on other co-benefits of high-performance homes.

PARTICIPATING BUILDERS

CHBA worked with builder members in Saskatchewan, Alberta, British Columbia and Ontario on the design, development, construction, testing, commissioning and knowledge dissemination of new part 9, affordable, replicable, and marketable prefabricated low rise MURBs.

We would like to acknowledge the builders who participated in this project (Zirnhelt Timber Frames, Avalon Master Builder, Landmark Homes, Big Block Construction, SEAN. and Doug Tarry Homes) for their ongoing effort and commitment to this initiative, and their willingness to build industry capacity by training and educating builders across the country. Their effort, transparency and willingness to share detailed lessons learned, opportunities for improvement and unanticipated wins truly created market change and supports the adoption of Net Zero Ready and Net Zero Homes.



PROJECT STATS

- A total of 49 dwelling units were built, with 10 achieving full Net Zero and 39 reaching Net Zero Ready.
- Big Block Construction completed the first round of Net Zero Ready units in 2020, with Avalon achieving occupancy in 2021, Landmark and Zirnhelt Timber Frames in 2022 and SEAN. finishing off in 2024.

| BUILDER | NET ZERO | NET ZERO READY | TOTAL |
|------------------|-----------|----------------|-----------|
| BIG BLOCK | 0 | 12 | 12 |
| AVALON | 8 | 8 | 16 |
| LANDMARK | 0 | 11 | 11 |
| ZIRNHELT | 2 | 0 | 2 |
| SEAN | 0 | 8 | 8 |
| TOTAL | 10 | 39 | 49 |

Learn more at chba.ca/net-zero-murbs



Avalon



Big Block Construction



Landmark Homes



SEAN.



Zirnhelt Timber Frames

GETTING TO NET ZERO ENERGY/READY RENOVATIONS

Funded primarily by Natural Resources Canada, the Net Zero Home Labelling Program for Renovations project continued CHBA's long history in leading energy efficiency in residential construction. It built on the existing Net Zero Home Labelling Program for new homes, which has been running since its pilot in 2015. A pilot version of the Net Zero Home Labelling Program for Renovations ran from April 2020 to March 2021 to validate technical and administrative details and was officially launched in October 2021.

Net Zero training was developed for renovators and energy advisors who want to be part of this exciting program. The training helps get the necessary knowledge into the hands of key stakeholders and accelerate the industry's capacity to renovate Canada's older housing inventory to Net Zero or Net Zero Ready. Qualified Net Zero Renovators must successfully complete the prescribed training courses as well as be enrolled in CHBA's RenoMark™ program.



Learn more at NetZeroRenos.com



PILOT PROJECTS / PARTICIPANTS

NET ZERO RENOVATION PILOT HOME **SOLARHOMES INC.** **netzero** **home**

Renovator: Peter Darrington, Solar Homes Inc. **Service Organization:** Emission

Energy Advisor: Cooper Lee, 4 Elements Integrated Design LTD. **Net Zero Pilot Home:** Calgary, AB (Climate Zone B)

Before Renovations: 14 TONNES /YR

After Renovations: 0 TONNES /YR

Before renovations the home produced more energy than it consumed!

After renovations the home uses no energy!

NET ZERO RENOVATION PILOT HOME **netzero** **SOLARHOMES INC.**

Renovator: Peter Darrington, Solar Homes Inc. **Service Organization:** 4 Elements Integrated Design

Energy Advisor: Cooper Lee, 4 Elements Integrated Design. **Net Zero Pilot Home:** Calgary, AB (Climate Zone B)

Before Renovations: 11 TONNES /YR

After Renovations: 0 TONNES /YR

Before renovations the home produced more energy than it consumed!

After renovations the home uses no energy!

NET ZERO RENOVATION PILOT HOME **netzero** **Butterwick** **DESIGN PLAN. BUILD.**

Renovator: Dave Butterwick, Butterwick Construction **Service Organization:** 4 Elements Integrated Design

Energy Advisor: Tyler Merriman, 4 Elements Integrated Design. **Net Zero Pilot Home:** Edmonton, AB (Climate Zone 7a)

Before Renovations: 14 TONNES /YR

After Renovations: 0 TONNES /YR

Before renovations the home produced more energy than it consumed!

After renovations the home uses no energy!

NET ZERO RENOVATION PILOT HOME **netzero** **My House**

Renovator: Graeme Huguen, My House Design/Build Team Ltd. **Service Organization:** CH2M - BC (City Green Solutions)

Energy Advisor: Scott Sheppard, Capstone Energy. **Net Zero Pilot Home:** Vancouver, BC (Climate Zone 4)

Before Renovations: 8.8 TONNES /YR

After Renovations: 0.8 TONNES /YR

Before renovations the home produced more energy than it consumed!

After renovations the home uses no energy!

NET ZERO RENOVATION PILOT HOME **netzero** **RDC FINE HOMES**

Renovator: Bob Deeks, RDC Fine Homes **Service Organization:** CH2M-BC

Energy Advisor: Tommy Wjun, Capital Home Energy Inc. **Net Zero Pilot Home:** Wilkes, BC (Climate Zone B)

Before Renovations: 115 TONNES /YR

After Renovations: 61 TONNES /YR

Before renovations the home produced more energy than it consumed!

After renovations the home uses no energy!

NET ZERO RENOVATION PILOT HOME **netzero** **SEASIDER**

Renovator: Steve Walter Construction **Service Organization:** EnerQuality Inc.

Energy Advisor: Angela Stutzmann, Building Knowledge Canada **Net Zero Pilot Home:** Uxbridge, ON (Climate Zone B)

Before Renovations: 92 TONNES /YR

After Renovations: 63 TONNES /YR

Before renovations the home produced more energy than it consumed!

After renovations the home uses no energy!

TACKLING THE UNDERGROUND ECONOMY

CHBA's **Get It In Writing!** campaign informs homeowners about the risks of hiring someone for cash without a written contract. CHBA RenoMark™ renovators are committed to always providing a contract. Government programs should reference RenoMark™.



PACE FINANCING PROGRAM

As CHBA's Net Zero Home Labelling Program continues to gain momentum, with it now adding renovation and multi-unit dwellings to the program (in pilot stages) as well, it is clear that successful, innovative financing programs could dramatically increase affordability and access for more Canadians to attain Net Zero levels of performance in their new or existing homes. PACE (Property Assessed Clean Energy) programming offers just such a solution.

For homeowners who are considering doing a deep energy retrofit, PACE is a financing tool that homeowners can use to upgrade their home's energy performance or install renewable energy systems with no money down but rather repaid on a property's municipal tax bill over time. Currently Edmonton, Toronto, Saskatoon, and Halifax all have active programs, and many more municipalities are investigating or in the process of implementing PACE across Canada.

Visit NetZeroRenos.com to read about the keys to developing a successful PACE Financing Program.

HELPING HOMEOWNERS WITH THE COST OF NET ZERO ENERGY

Renovating a home to Net Zero/Ready can entail significant costs for homeowners. Ultimately, it's an investment and should reflect in the potential resale value of the home. CHBA and the Appraisal Institute of Canada worked collaboratively to ensure green and energy efficient investments in a property are taken into account when a residential property is being appraised. This work was done by leveraging the US Appraisal Institute Green and Energy Efficient Addendum.



NET ZERO RENOVATIONS WORKING GROUP

Blaise McDonald,
MAC Renovations Ltd.

Brad McLaughlin,
MCL Construction Ltd.

Brad Sveinson,
Character Homes Ltd.

Dale Rott,
Effect Homes

Dave Butterwick,
Butterwick Construction
& Carpentry Ltd.

Derek Taylor,
Whitehall Homes &
Construction

Luke Dolan,
Capital Home Energy

Nick Gazo,
NAIMA Canada

Peter Darlington,
Solar Homes Inc.

Shawna Henderson,
Bluehouse Energy

Stephen Magneron,
Homesol

Steve Snider,
Steve Snider Construction

Gary Hamer,
(Net Zero Technical
Committee Rep.)

INDUSTRY TOOLS & TRAINING

Our first Net Zero Reno initiative produced several key tools in addition to the Net Zero Renovator training. These tools will be utilized for the new Net Zero Reno initiative, and more tools will be developed.



TOWARDS COST-EFFECTIVE NET-ZERO ENERGY READY RESIDENTIAL RENOVATIONS

Improving the energy efficiency of existing homes is crucial to reaching Canada's greenhouse gas emissions goals. There are over 15 million existing homes in Canada, almost all of which can improve their energy performance. Through this initiative we will be advancing innovative technologies and approaches to pursue net zero levels of performance in the most cost-effective ways possible, a key to making it possible for more Canadians to reduce their GHG emissions at home.

Building on the work of the pilot Net Zero Renovations, this demonstration project is actively seeking to address barriers to scaling the implementation of deep energy assessments and design solutions. CHBA's role is to work with the industry to build capacity through providing Net Zero training for renovators, energy advisors and relevant contractors, and to develop tools and processes that will allow for a scalable and cost-effective house-as-a-system approach to improving homes through the CHBA Net Zero Home Labelling Program.

With support from Natural Resources Canada, CHBA is working with select Municipalities who have or are developing programs supporting deep energy retrofits and working to give direction to their constituents on viable pathways to upgrade their existing home to Net Zero or Net Zero Ready. The scope of this project is to support industry in delivering 100-150 Net Zero Renovations across Canada, representing a variety of climate zones and geographical areas. See the project map for where industry leaders are collaborating with their municipal representatives and contractors to bring the best options to their homeowner clients. Each project is supported through professional guidance from experts, during this integrated process, from start to finish.

ABOUT THE ADVISORY GROUP

CHBA relies on the vast expertise of our members. The Advisory Group for the Towards Net Zero Renovations project is a mix of Qualified Net Zero renovators and energy advisors, building scientists, researchers, and educators. The CHBA members on the advisory group will help guide and develop the delivery and development of cost-effective paths to Net Zero for existing buildings.

ADVISORY GROUP

Andy Oding,
Building Knowledge Canada

Ben Hildebrandt, SAIT

Gary Hamer, BC Hydro

Gary Sharp,
Airtight Home Technologies

Jack Zhou,
A&J Energy Consultants

Lou Orazem,
Inspire Homes Inc.

Peder Madsen,
CCR Build + Remodel

Peter Amerongen, Butterwick
Construction & Carpentry Ltd.

Peter Darlington,
Solar Homes Inc.

Robin Goldstein,
Federation of Canadian
Municipalities

Shawna Henderson,
Blue House Energy

Simon Wang,
Naikoon Contracting Ltd.

Stephen Magneron,
Homesol Building Solutions Inc.

Tyler Hermanson,
4 Elements Integrated Design
Ltd.

Mark Carver,
NRCAN CanmetENERGY

Patric Langevin, NRCAN
CanmetENERGY

PARTICIPATING MUNICIPALITIES

Each of the Municipalities and organizations are actively developing and/or implementing programs for their constituents and clients to help navigate to lower energy, improved housing inventory and specific local targets. These residential projects include detached single family homes, attached units and townhomes as well as low-rise multi-family buildings.



RENOVATION PROJECT TIMELINE



NET ZERO READY HOMES COMPARED TO NBC ENERGY TIERS

In 2021, prior to the National Research Council's (NRC) publishing of the 2020 National Model Building codes (NBC 2020), which took place in March 2022, CHBA staff developed a report on the industry's Readiness to Code Energy Tiers. The analysis and report were part of a Natural Resources Canada, Office of Energy Efficiency Housing Division (NRCan OEE HD) funded contribution agreement. Part of this analysis reviewed the NBC energy tiers.

| TARGET METRIC | APPLICABLE ENERGY PERFORMANCE TIER | | | | |
|----------------------|------------------------------------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 |
| Envelope Improvement | N/A | ≤5% | ≤10% | ≤20% | ≤40% |
| Energy Improvement | ≤0% | ≤10% | ≤20% | ≤40% | ≤70% |
| Cooling Criteria | ✓ | ✓ | ✓ | ✓ | ✓ |

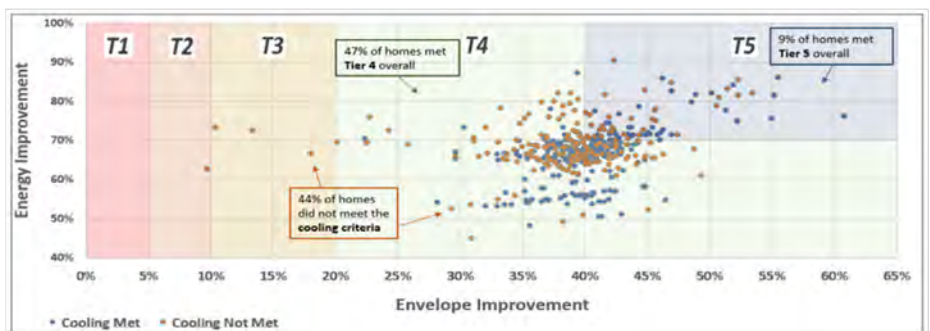
The three metrics required for each of the five tiers are: envelope improvement, energy improvement, and peaking cooling load. Each of the metrics consider the actual homes relationship with a reference house, which is a simulation of the house built to code minimum.

The envelope improvement metric considers heat loss through the building enclosure, the energy improvement metric considers the home's overall energy consumption, and the cooling criteria considers the potential for the home to overheat. It's important to note that all three metrics would need to be met to comply with a performance tier.

The analysis compared the performance of 447 CHBA Net Zero and Net Zero Ready Homes to the performance levels for Tier 5, which were intended to align with 'Net Zero Energy Ready' performance. NRCan OEE and CanmetENERGY staff assisted in this analysis by using their Housing Technology Assessment Platform (HTAP) to automate the data analysis process for CHBA Net Zero and Net Zero Ready Homes.

It was found that Tier 5 exceeded the performance level of all but 9% of the CHBA Net Zero Ready Homes, demonstrating that Tier 5 overshoots net zero energy ready performance. CHBA has and will continue to make recommendations to the Canadian Board for Harmonized Construction Codes (CBHCC), as well as authorities having jurisdiction, to take this issue into account.

This chart displays how each of the 447 CHBA labelled homes performed against the three NBC metrics. Each home is represented by a dot. Envelope improvement scale is shown on the x-axis, energy improvement scale is shown on the y-axis, and the cooling criteria is depicted in the colour scheme of the dots; a blue dot shows that the home has met the proposed cooling criteria, while an orange dot shows that the home did not meet the cooling criteria, and therefore is non-compliant with any tier.



ENABLING TIERED CODES IMPLEMENTATION AND MARKET PREPAREDNESS

To help prepare the industry for future building codes, in April 2024 CHBA launched a 3-year project called 'Enabling Tiered Codes – Implementation and Market Preparedness.' The project is funded by Natural Resources Canada (NRCAN) under the Codes Acceleration Fund (CAF), which is part of the federal government's Green Buildings Strategy to accelerate innovation in making Canada's buildings more affordable, efficient, comfortable, and resilient.

The objective of the project is to support efforts to help enable the residential construction industry to effectively adopt forthcoming high-performance building codes, including the highest feasible energy performance tiers of the national model energy codes or other high-performance building codes, such as net-zero emissions codes, by building industry capacity. The project will also inform the building code process, as it looks at buildability, costs and other hurdles that need to be overcome for successful implementation.

PROJECT TASKS

- Multiple Net Zero Ready "Builder Option Packages" (NZr BOPs) will be developed to provide builders and energy advisors various performance-based options to build homes to Net Zero Ready.
- In addition to developing new training on NBC Section 9.36 for builders, CHBA will offer rebates and discounts for select net zero training courses during this project.
- Operational and embodied GHG emissions programming, as well as resilience best practices (to protect homes against extreme weather events due to climate change) will be developed for the voluntary CHBA Net Zero Home Labelling Program. To provide insight and guidance to accomplish this work, an expert **Emissions & Resilience Working Group (ERWG)** has been established. (**Find the Emissions & Resilience Working Group member list in the directory.**)

Ongoing updates for this initiative can be found at chba.ca/enabling-tiered-codes.



NET ZERO COUNCIL (FY 2023/2024)

Net Zero Management Committee

| | | |
|-------------------------------------|---------------------------|----|
| Avalon Master Builder | Chris Williams, CHAIR | AB |
| Minto Group | Matthew Brown, VICE CHAIR | ON |
| Insightful Healthy Homes | Arthur Lo, 2ND VICE CHAIR | BC |
| Building Knowledge Canada | Andy Oding, PAST CHAIR | ON |
| RDC Fine Homes | Bob Deeks, PAST CHAIR | BC |
| Butterwick Construction & Carpentry | Peter Amerongen | AB |
| Doug Tarry Homes | Doug Tarry | ON |
| Landmark Group of Companies | Haitao Yu | AB |
| Mattamy | Phillip Santana | ON |
| Solar Homes | Peter Darlington | AB |

Gold Sponsor Members

| | | |
|----------------------|------------|----|
| Owens Corning Canada | Sal Ciarlo | ON |
|----------------------|------------|----|

Silver Sponsor Members

| | | |
|---------------------------|------------------|----|
| All Weather Windows | Tracy Nadiger | AB |
| Enbridge Gas Distribution | Susan Cudahy | ON |
| Fortis BC | Alex Fermon | BC |
| Mitsubishi Electric | Caitlin Forrest | ON |
| Panasonic Canada | Scott Kraus | ON |
| Reliance Home Comfort | Shannon Bertuzzi | ON |

Bronze Sponsor members

| | | |
|-----------------------------------|-------------------|----|
| 1 Click Heating and Cooling Inc. | Nathan Horton | ON |
| ABC Supply Co. | Michelle Dagenais | AB |
| AeroSeal | Ian Walker | ON |
| BASF Canada | Afshin Rezai | ON |
| BC Hydro | Gary Hamer | BC |
| Bluewater Energy | William Beardmore | ON |
| Canadian Wood Council | Rob Jonkman | ON |
| CHBA Modular Construction Council | Darren Basset | BC |
| CHBA-New Brunswick | Lauren Lipka | NB |
| DuPont Canada | Eric Lavoie | ON |
| EfficiencyOne | Charity Carr | NS |
| Energy Saving Products | Timothy Prevost | AB |
| EnerQuality | Rose Benedetto | ON |
| LP Building Solutions | David Lomas | BC |
| NB Power | Sarah Mudge | NB |
| Rockwool | Omar Abu Holy | ON |
| Schneider Electric Canada Inc. | Mathieu Laniel | ON |

Builder/Renovator members

| | | |
|-----------------------------------|-------------------|----|
| Abstract Homes & Renovations Inc. | Sandro Stefanucci | BC |
| Activa | Geoff McMurdo | ON |
| Averra | Gavin McLeod | BC |
| Brookfield Properties | Lindsey Wachowicz | AB |
| Cedarglen Homes | Pretum Narang | AB |
| Chatsworth Fine Homes | Dan Capuano | ON |
| Claxton + Marsh | Shawn Marsh | ON |
| Clay Construction | Larry Clay | BC |
| Corvinelli Homes | John Corvinelli | ON |
| Dunsire Developments | Shawn Keeper | ON |
| Effect Home Builders | Scott Wilson | AB |
| Great Gulf | Shaun Joffe | ON |
| Habitat Studio | Rick Young | AB |
| Jayman BUILT | Dave Krasman | AB |
| Land Ark | Kevin Rankin | ON |
| National Homes | Deena Pantalone | ON |

| | | |
|-------------------------------|------------------|----|
| Net Zero Developments | Sikander Singh | AB |
| Qualico Developments Canada | Derrick Hiltz | MB |
| Riko Passive Homes | Richard LeBlanc | NB |
| RND Construction | Roy Nandram | ON |
| s2e Technologies Developments | Derek Satnik | ON |
| Seaman and Sons Builders | Derek Seaman | ON |
| Sean | Sean Mason | ON |
| Stattonrock Design & Build | Dan Dueck | BC |
| Steve Snider Construction | Stephen Snider | ON |
| Urbandale Construction | Melissa Boudreau | ON |
| Wrightshaven Homes | Steven Wright | ON |

Academia Members

| | | |
|------------------------------------|--------------|----|
| SAIT Polytechnic GBT Access Centre | Melanie Ross | AB |
| Saskatchewan Polytechnic | Angela Deans | SK |

Ex-Officio Members

| | | |
|--|------------------|----|
| NRCan OEE | Alex Bigonnesse | ON |
| NRCan CanmetENERGY | Meli Stylianou | ON |
| NRCan CanmetENERGY LEEP | Patric Langevin | ON |
| NRC | Sarah Gibb | ON |
| CMHC | Marie-Ève Sirois | ON |
| Canadian Forces Housing Agency | Amy Herbert | ON |
| Canadian Association of Consulting Energy Advisors (CACEA) | Cindy Gareau | ON |

Ex-Officio Reciprocal Members

| | | |
|---|----------------|----|
| CHBA Executive Committee | Alex Tavuchis | BC |
| CHBA Executive Committee | Sue Wastell | ON |
| CHBA Executive Committee | Matt McCurrach | BC |
| CHBA Executive Committee | Rick Weste | AB |
| CHBA Technical Research Committee (TRC) | Grant Cooper | NL |
| CHBA Canadian Renovators' Council (CRC) | Curtis Mercer | NL |

NET ZERO TECHNICAL COMMITTEE (AS OF SEP 2024)

| | | |
|-------------------------------|--------------------------|----|
| Building Knowledge Canada | Angela Bustamante, CHAIR | ON |
| S2e Technologies Developments | Derek Satnik, PAST CHAIR | ON |
| BC Hydro | Gary Hamer, PAST CHAIR | BC |
| Avalon Master Builder | Mark Lindenbach | AB |
| Bluewater Energy | Wil Beardmore | ON |
| Capital Home Energy | Luke Dolan | BC |
| Ecosynergy | Amelie Caron | AB |
| Empire Communities | Ron Isaac | ON |
| Enbridge | Matt Cable | ON |
| Home Building Solutions | Stephen Magneron | ON |
| Insightful Healthy Homes | Arthur Lo | BC |
| Landmark Group of Companies | Haitao Yu | AB |
| Owens Corning Canada | Salvatore Ciarlo | ON |
| Solar Homes | Peter Darlington | AB |

LEEP ADVISORY COMMITTEE (AS OF SEP 2024)

| | | |
|-------------------------------|---------------------------------|----|
| Triple M Housing | Simarjit Bains, Chair & MOD Rep | AB |
| Cooper Custom Homes | Grant Cooper, TRC Rep | NL |
| K&P Contracting | Curtis Mercer, CRC Rep | BC |
| S2E Technologies Developments | Derek Satnik, NZC Rep | ON |
| 4 Elements Integrated Design | Tyler Hermanson, EA West Rep | AB |
| Building Knowledge Canada | Andy Oding, EA Central Rep | ON |
| CHBA-NB | Lauren Lipka, EA East Rep | NB |

| Builders & Renovators | | |
|-------------------------------------|-----------------|----|
| RDC Fine Homes | Bob Deeks | BC |
| MCL Construction | Brad McLaughlin | NB |
| Broadview Homes | Dale Verville | MB |
| North Ridge Development Corporation | Errol Fisher | SK |
| Corvinelli Homes | John Corvinelli | ON |
| Lincolnberg | Keith Jansen | AB |
| Inspire Homes | Louis Orazem | ON |
| CCR Build + Remodel | Peder Madsen | ON |

GETTING TO NET ZERO ENERGY/READY RENOVATIONS - WORKING GROUP (2019-2021)

| | | |
|--|------------------------|----|
| MAC Renovations Ltd. | Blaise McDonald | BC |
| MCL Construction Ltd. | Brad McLaughlin | NB |
| Character Homes Ltd. | Brad Sveinson | MB |
| Effect Homes | Dale Rott | AB |
| Butterwick Construction & Carpentry Ltd. | Dave Butterwick | AB |
| Whitehall Homes & Construction | Derek Taylor | ON |
| Capital Home Energy | Luke Dolan | BC |
| NAIMA Canada | Nick Gazo | ON |
| Solar Homes Inc. | Peter Darlington | AB |
| Bluehouse Energy | Shawna Henderson | NS |
| Homesol | Stephen Magneron | ON |
| Steve Snider Construction | Steve Snider | ON |
| BC Hydro | Gary Hamer (NZ TC Rep) | BC |

TOWARDS COST-EFFECTIVE NET-ZERO ENERGY READY RESIDENTIAL RENOVATIONS- ADVISORY GROUP (2021-2026)

| | | |
|--|-------------------|----|
| Building Knowledge Canada Inc. | Andy Oding, Chair | ON |
| SAIT, School of Construction | Ben Hildebrandt | AB |
| BC Hydro | Gary Hamer | BC |
| Airtight Home Technologies | Gary Sharp | ON |
| A&J Energy Consultants | Jack Zhou | ON |
| Inspire Homes Inc. | Lou Orazem | ON |
| CCR Build + Remodel Inc. | Peder Madsen | ON |
| Butterwick Construction & Carpentry Ltd. | Peter Amerongen | AB |
| Solar Homes Inc. | Peter Darlington | AB |
| Blue House Energy | Shawna Henderson | NS |
| Naikoon Construction Ltd. | Simon Wong | BC |
| Homesol Building Solutions Inc. | Stephen Magneron | ON |
| 4 Elements Integrated Design Ltd. | Tyler Hermanson | AB |
| FCM (ex-officio) | Robin Goldstein | ON |
| NRCan CanmetENERGY (ex-officio) | Mark Carver | ON |
| NRCan CanmetENERGY LEEP (ex-officio) | Patric Langevin | ON |

NET ZERO EMISSIONS & RESILIENCE WORKING GROUP (2024-2027)

| Voting Members (Builders/Renovators) | |
|---|----------------------------|
| Avalon Master Builder | Mark Lindenback, Co-Chair |
| Minto Communities | Charles Boechler, Co-Chair |
| Doug Tarry Homes | Jamie Yolkowskie |
| Glenview Homes | Pat Daniels |
| J.Zsiros Contracting | Jim Zsiros |
| Dueck Builders | Josh Friesen |
| Mattamy Homes | Phil Santana |
| Sterling Homes - Edmonton | Kelly Williams |

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| ThinkBright Homes | Meredith Hamstead |
| Wilden Construction Corp | Joshua Smith |
| Voting Members (Non-Builders/Renovators) | |
| 4 Elements Integrated Design | Hayley Puppato |
| BC Hydro | Gary Hamer |
| Bernhardt Contracting | Tom Giltenan |
| Builders for Climate Action | Chris Magwood |
| Canadian Wood Council | Natasha Jeremic/ Sarah Stevenson/ Noah Fetterly |
| Carbon Wise | Elisabeth Baudinaud |
| Carleton University | Scott Bucking |
| Enbridge Gas | Cora Carriveau |
| Homesol Building Solutions | Stephen Magneron |
| Ex-Officio Non-Voting Members | |
| BC Housing | Wilma Leung |
| Building Knowledge Canada | Mark Rosen/ Alexis Minniti/ Scott Schrier |
| CanmetENERGY | Hamish Pope |
| CanmetENERGY LEEP | Stefanie Coleman |
| CHBA-BC | Pauline Rupp |
| CHBA-NB | Claudia Simmonds |
| City of Guelph | Patrick Andres |
| City of Ottawa | Marie Hanchet |
| EnerQuality | Luis Carvalheiro |
| ICLR | Dan Sandink |
| NRC | Marzieh Riahinezhad/ Luminita Dumitrascu |
| NRCan-CCIAD | Kelly Montgomery/ Nick Theriault |
| NRCan-OEE | Alexandre Bigonnesse |
| OHBA | Miyoko Oikawa |
| Volta Research | Leigh St. Hilaire / Aidan Brookson |

CHBA QUALIFIED NET ZERO SERVICE ORGANIZATIONS (As of Sep 2024)

| | | |
|------------------------------------|-------------------------|----------------------|
| 4 Elements Integrated Design Ltd. | Cooper Le | AB & BC |
| Building Efficiency | Stephen Downs | ON & AB |
| Capital Home Energy Inc. | Luke Dolan | BC |
| CHBA British Columbia | Vanessa Joehl | BC |
| CHBA New Brunswick | Claudia Simmonds | NB, NS & PEI |
| CHBA Newfoundland and Labrador | Alexis Foster | NL |
| EnerVision Healthy Housing Choices | Steve Jackson | AB |
| EnviroCentre | Henock Abraham | ON |
| EnerQuality | Luis Carvalheiro | Canada-Wide |
| Green Canada Home Advisors Inc. | Afshin Amirpoor Daylami | Canada-Wide |
| Greenthink Inc. | Shawn Sales | ON |
| Homesol Building Solutions | Stephen Magneron | ON, NB, NS, NL & PEI |
| NRG Inspections & Consulting | Jason Breker | SK & MB |
| PrairieHOUSE Performance Inc. | Gio Robson | MB |
| Sun Ridge Residential | Darcy Bzdel | SK, MB & AB |
| ThermalWise | Jordan McDonald | NS, NB & PEI |

CHBA QUALIFIED NET ZERO ENERGY ADVISORS (As of Sep 2024)

| | |
|-------------------------|---------------------------------|
| Afshin Amirpoor Daylami | Green Canada Home Advisors Inc. |
| Alireza Rokni | EnerSaver Solutions |
| Amelie Caron | Ecosynergy |
| Amir Ekhlas | EnerSaver Solutions |
| Andy Oding | Building Knowledge Canada Inc. |
| Angela Bustamante | Building Knowledge Canada Inc. |

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|-----------------------|------------------------------------|
| Arman Masoumi | JRG Building Engineering Ltd. |
| Brandon Molitwenik | Bernhardt Contracting Inc. |
| Bryan Stuart | Simply Stylish by Design |
| Cameron Lockhart | Carbon-Wise |
| Chelsah Thomas | Sol Invictus Energy Services |
| Cooper Le | 4 Elements Integrated Design Ltd. |
| Daniel Halbrook | Homesol Building Solutions Inc. |
| Darcy Bzdel | Sun Ridge Residential Inc. |
| Dong Meng | E3 Eco Group Inc. |
| Emma Conway | E3 Eco Group Inc. |
| Gerry Sawkins | 3 West Building Energy Consultants |
| Gilles Lesage | Total Homes Solutions |
| Gord Cooke | Building Knowledge Canada Inc. |
| Graham Knights | Skye Ridge Enterprises Ltd. |
| Hayley Puppato | 4 Elements Integrated Design Ltd. |
| Jack Zhou | A&J Energy Consultants |
| Jacob Marques | A & J Energy Consultants |
| Jason Breker | NRG Inspections & Consulting |
| Jason Fraser | Homesol Building Solutions Inc. |
| Jeffrey Robinson | EnerTech Solutions Ltd. |
| Jessica Allan | Aqua-Coast Engineering |
| Joe Crowley | Homesol Building Solutions Inc. |
| Jordan Lester | Berhardt Contracting Ltd. |
| Jordan Summers | Summers Inc. |
| Josh Ratzlaff | Airtight Consulting Inc. |
| Kent Pearson | Advanced Energy Advisors |
| Kevin O'Donnell | Building Knowledge Canada Inc. |
| Kyle Anders | Building Knowledge Canada Inc. |
| Lauren Lipka | CHBA - New Brunswick |
| Lauren Swain | Enviromatics Group |
| Lewis Lix | Enviromatics Group |
| Luke Dolan | Capital Home Energy Inc. |
| Mahmood Bin Haji | A&J Energy Consultants |
| Mark Bernhardt | Berhardt Contracting Ltd. |
| Mark Carter | Berhardt Contracting Ltd. |
| Mark Rosen | Building Knowledge Canada Inc. |
| Matheus Alfred-Olmedo | Capital Home Energy Inc. |
| Mehmet Ferdiner | Building Knowledge Canada Inc. |
| Michael Gilezan | Building Knowledge Canada Inc. |
| Mounica Parimi | Enersaver Solutions Inc. |
| Nick Watson | EnviroMez Home Energy Modeling |
| Niloofar Zabolipour | A & J Energy Consultants |
| Norman Garcia | All Climate Consulting |
| Michael Gilezan | Building Knowledge Canada Inc. |
| Parvin Asadi | Read Jones Christoffersen Ltd. |
| Prab Atwal | E3 Eco Group Inc. |
| Randy Fontaine | EnviroCentre |
| Richard Kadulski | Richard Kadulski Architect |
| Robert Weatherseed | Trillium Home Inspections |
| Rod Croome | Hometech Energy Solutions Inc. |
| Ross Michel | E3 Eco Group Inc. |
| Sacha Klein | Sacha Klein Energy Services |
| Scott Schrier | Building Knowledge Canada Inc. |
| Scott Silverthorn | Capture Energy Inc. |
| Shahin Arvandi | Green Canada Home Advisors Inc. |
| Stephen Downs | Building Efficiency Inc. |
| Stephen Magneron | Homesol Building Solutions Inc. |

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|----------------------|-----------------------------------|
| Suzie Clifton | Green Wave Consultants Ltd. |
| Tessa Hall | Ecolibrium Energy Solutions Inc. |
| Toby Smith | Building Knowledge Canada Inc. |
| Todd (Tao) Xue | Vantage Energy Solutions |
| Tommy Youngsung Byun | Capital Home Energy Inc. |
| Troy Tilbury | Building Knowledge Canada Inc. |
| Tyler Hermanson | 4 Elements Integrated Design Ltd. |

CHBA QUALIFIED NET ZERO TRAINERS (As of Sep 2024)

| | |
|------------------|-----------------------------------|
| Andy Oding | Building Knowledge Canada Inc. |
| Darcy Bzdel | Sun Ridge Residential Inc. |
| Gord Cooke | Building Knowledge Canada Inc. |
| Jack Zhou | A & J Energy Consultants |
| Jason Breker | NRG Inspections & Consulting |
| Lauren Lipka | CHBA - New Brunswick |
| Mark Bernhardt | Bernhardt Contracting Ltd. |
| Mark Rosen | Building Knowledge Canada Inc. |
| Stephen Downs | Building Efficiency Inc. |
| Stephen Magneron | Homesol Building Solutions Inc. |
| Toby Smith | Building Knowledge Canada Inc. |
| Tyler Hermanson | 4 Elements Integrated Design Ltd. |

CHBA QUALIFIED NET ZERO BUILDERS (As of Sep 2024)

| | |
|------------------------------|----|
| 360 Developments Group | ON |
| Activa | ON |
| Adaptive Homes Ltd. | BC |
| All Elements | BC |
| Altare Developments | ON |
| AuthenTech Homes Ltd. | BC |
| Avalon Master Builder | AB |
| Averra Developments Inc. | BC |
| Bercum Builders | BC |
| Bickell Built Homes Ltd. | ON |
| Big Block Construction | SK |
| Blue Water Concepts | BC |
| Blueline Contracting | BC |
| Boehm Construction | BC |
| Brookfield Residential | AB |
| Buck Robertson Contracting | BC |
| Butterwick Construction | AB |
| Campanale | ON |
| CanSwede Homes | ON |
| Cantiro Homes | AB |
| Carey Homes | ON |
| Cedarglen Homes | AB |
| CFN Construction Ltd. | SK |
| Chatsworth Fine Homes | ON |
| CHBA - Central Interior | BC |
| Chelten Developments | ON |
| Claxton + Marsh | ON |
| Coast Essential Construction | BC |
| Corvinelli Homes | ON |
| Creation Homes | ON |
| Degagne Carpentry | ON |
| Diamond Head Developments | BC |

DIRECTORY

| | |
|------------------------------|----|
| Don May Construction | BC |
| Doug Tarry Homes Ltd. | ON |
| Duimering Homes | ON |
| Dunsire Developments | ON |
| Dwellings Design-Build | ON |
| Effect Home Builders Ltd. | AB |
| Ehrenburg Homes | SK |
| Element Construction | SK |
| Enerwise Homes | BC |
| Falcon Heights Contracting | BC |
| FarSight Homes | ON |
| Forever Homes | ON |
| Fulcrum Developments | BC |
| Gatta Homes | ON |
| Gatto Homes Inc. | ON |
| Glenmark Homes | BC |
| Grandeur Housing Ltd. | MB |
| Great Gulf Homes | ON |
| Greener Homes Ltd. | AB |
| Habitat Studios | AB |
| Harasym Developments Inc. | ON |
| Hasler Homes Ltd. | BC |
| Hill Bros Ltd. | NB |
| Homes by Sorensen | AB |
| Icon Homes Ltd. | BC |
| Insightful Healthy Homes | BC |
| J. Zsiros Contracting Ltd. | BC |
| Jayman Built | AB |
| John Roberts Signature Homes | ON |
| K & P Contracting Ltd. | NL |
| K. James Construction | ON |
| Kaner Contracting Inc | ON |
| Kemp Construction | BC |
| Kingwell Fine Homes | ON |
| Land Ark Homes | ON |
| Landmark Legacy Homes | AB |
| Lanefab Design Build | BC |
| Lida Homes | BC |
| Little Foot Properties Ltd | NS |
| Lucchetta Homes | ON |
| Made To Last Custom Homes | BC |
| Maison Fine Homes | SK |
| Maple City Homes | ON |
| Mattamy Homes | ON |
| McKenzie Building Group Inc. | ON |
| MCL Construction Ltd. | NB |
| Metric Homes | ON |
| Minto Communities | ON |
| Naikoon Contracting Ltd. | BC |
| Net Zero Developments | AB |
| North Ridge Developments | SK |
| Northern Homecraft Ltd. | BC |
| OakWood | ON |
| Ocean's Edge Contracting | BC |
| Osa Construction | BC |
| OTG Construction | ON |
| Pacesetter Homes - Saskatoon | SK |

| | |
|--------------------------------------|----|
| PCMnow.com Inc. | ON |
| Perspective Design Build | BC |
| Perspective Homes by Pacific | BC |
| Prime Habitat Builders | BC |
| Profile Custom Homes | ON |
| Providence Homes | ON |
| Qualico Developments Inc. (Foxridge) | BC |
| Qwest Homes | ON |
| Rain City Homes Ltd. | BC |
| Ranotech Canada Ltd. | BC |
| RDC Fine Homes | BC |
| Riko Homes Ltd. | NB |
| River Tree Developments | NS |
| RND Construction | ON |
| Rosecrest Homes | AB |
| Royal Homes Limited | ON |
| Seaman & Sons Builders | ON |
| SEAN. | ON |
| Selkirk Developments | SK |
| Sharpe Builders | NB |
| Sifton Properties Ltd. | ON |
| Sinclair Homes | ON |
| Slout Construction | ON |
| Sprucebridge Construction | ON |
| Stattonrock Construction | BC |
| Sterling Homes - Calgary | AB |
| Sterling Homes - Winnipeg | MB |
| Steve Dennison Homes | ON |
| Steve Snider Construction Inc. | ON |
| Streetside Developments (BC) | BC |
| STW Cutting Edge Carpentry | BC |
| Tartan Homes Corp. | ON |
| Terra View Homes Inc. | ON |
| The Acorn Development Corp | ON |
| The Conscious Builder | ON |
| The Lanark Design Build Group | ON |
| Tooketree Passive Homes | ON |
| Ulko Contractors | BC |
| Urbandale Construction | ON |
| Veloce Luxury Homes | ON |
| Watermark Custom Built Homes | BC |
| Wrightshaven Homes Ltd. | ON |
| Zirnhelt Timber Frames | BC |

CHBA QUALIFIED NET ZERO RENOVATORS (As of Sep 2024)

| | |
|------------------------------|----|
| Butterwick Construction | AB |
| CCR Build + Remodel | ON |
| Lagois Design-Build-Renovate | ON |
| My House Design/Build Team | BC |
| Naikoon Contracting Ltd. | BC |
| RDC Fine Homes | BC |
| Solar Homes Inc | AB |
| Steve Snider Construction | ON |

BE A PART OF THIS EFFORT!

Join the **CHBA Net Zero Council** and be part of the leadership group working together to accelerate the voluntary adoption of Net Zero Homes in Canada. Your voice at this national table helps direct the work! Participate in networking with the targeted group of industry peers.

Find the terms of Reference, Member & Sponsor Benefits, and Application Form at chba.ca/nzc.



Being part of the **CHBA Net Zero Home Labelling Program** instills confidence in homeowners and other industry professionals. It shows that your homes adhere to rigorous two-tiered technical requirements and demonstrates that you're ahead of the curve and a leader among builders, renovators, and energy advisors.

Learn more about labelling your homes and becoming qualified at chba.ca/nzhlp.

BUILDER | RENOVATOR | ENERGY ADVISOR | TRAINER | SERVICE ORGANIZATION

