

Report to Civic Works Committee

To: Chair and Members
Civic Works Committee

From: Kelly Scherr, P.Eng., MBA, FEC
Deputy City Manager, Environment & Infrastructure
Scott Mathers, P.Eng., MPA
Deputy City Manager, Planning & Economic Development

Subject: Participation in Canadian Home Builders' Association Project
- Towards Cost-Effective Net-Zero Energy Ready Residential Renovations

Date: June 21, 2022

Recommendation

That the on the recommendation of the Deputy City Manager, Environment and Infrastructure and the Deputy City Manager, Planning & Economic Development, the by-law to authorize and approve, substantially in the form of, a Memorandum of Understanding between the Canadian Home Builders' Association and The Corporation of the City of London and to authorize the Mayor and the City Clerk to execute the Memorandum of Understanding be **APPROVED**.

Executive Summary

The purpose of this report is to provide Committee and Council with background information and to request approval for the City of London's participation in the Canadian Home Builders' Association (CHBA) project entitled "Towards cost-effective net-zero energy ready residential renovations", as outlined in the Memorandum of Understanding. London would be one of seven municipalities participating, along with Durham Region, Calgary, Edmonton, Ottawa, Saskatoon, and Toronto. The London Home Builder's Association (LHBA) is a member of the CHBA.

The CHBA project will increase local capacity and competency in the residential renovation industry by training local renovators to safely renovate homes to net-zero ready levels of performance, using local LHBA members for all projects, thereby ensuring that they carry appropriate insurance, adhere to a code of ethics, provide written contracts, and obtain permits.

The CHBA project also involves the selection of up to 20 homes in London to be retrofitted to net-zero energy ready standards as per the CHBA's Net Zero Home Labelling Program requirements. This can include City of London social housing. City staff recommend a 50:50 split in participation between private homeowners and City of London social housing. Participant selection would take place in 2023 and retrofit activity would take place in 2024.

Participants will be responsible to financing this retrofit work, with assistance from existing and future planned/proposed incentives as well as funding mechanisms such as the proposed Property-Assessed Clean Energy (PACE) style home energy retrofit program using the Local Improvement Charge (LIC) mechanism and/or the upcoming interest-free Canada Greener Homes Loan program. Other financing sources will also be considered.

This five-year project is designed to help harmonize net-zero housing standards and requirements in Canada and shared knowledge across several provinces. The total value of this project, including in-kind time from renovators and municipal staff, is estimated at over \$24 million, with Natural Resources Canada providing \$4,467,750 towards project costs. City of London's role and responsibilities include a commitment to in-kind involvement and leveraging future proposed work with the BetterHomes Ontario

consortium – a joint program of the Association of Municipalities of Ontario, Clean Air Partnership and Heating, Refrigeration and Air Conditioning Institute of Canada – to assess the feasibility of a PACE-style home energy retrofit program using the LIC mechanism in Ontario. Funding for this work is currently being provided by the Federation of Canadian Municipalities (FCM) Community Efficiency Financing (CEF) Studies stream, which will then be used to support the future application to the FCM CEF program for a home energy retrofit pilot project for launch in 2023. The City's only financial commitment at this time is \$15,000 from approved funds.

Participation in this project supports the Climate Emergency Action Plan, specifically the home energy retrofit actions within Area of Focus 2 – Taking Action Now (Household Actions).

Linkage to the Corporate Strategic Plan

Municipal Council's 2019-2023 Strategic Plan for the City of London continues to recognize the need for a more sustainable and resilient city. Deep energy retrofits of existing housing addresses three of the five Areas of Focus, at one level or another:

- Strengthening Our Community
- Building a Sustainable City
- Growing our Economy

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.

On April 12, 2022, Municipal Council approved the Climate Emergency Action Plan which includes Area of Focus 2, Taking Action Now (Household Actions), specifically Action No.1 – Home Energy Retrofits.

Analysis

1.0 Background Information

The CHBA invited the City of London to support and participate in its proposal entitled "Towards cost-effective net-zero energy ready residential renovations" in response to the Natural Resources Canada (NRCan), Office of Energy Research and Development, Green Infrastructure Phase II, Energy Efficient Buildings Program call for proposals. London would be one of seven municipalities participating, along with Durham Region, Calgary, Edmonton, Ottawa, Saskatoon, and Toronto.

The CHBA project will increase local capacity and competency in the residential renovation industry by training a large number of renovators to safely renovate homes to net-zero ready levels of performance, using local LHBA members for all projects, thereby ensuring that they carry appropriate insurance, adhere to a code of ethics, provide written contracts, and obtain permits. Renovators will be trained through CHBA's Net Zero Program to use the "house-as-a-system" approach focused on the building envelope and highly efficient technologies/equipment. This is critical to build confidence and trust with homeowners, and to protect both parties from potentially health and safety consequences of nondurable renovations. Municipal building officials from participating municipalities will also be participating to learn about the net-zero ready measures that will be undertaken through this project

The City of London has a long history of collaboration with both the LHBA and NRCan, starting with the London EnerGuide Partnership in 2004 to promote NRCan's EnerGuide for New Houses. This partnership then led London to be the pilot community

for NRCan's builder-led new home building technologies and practices evaluation process from 2006 to 2008 known then as the London Energy Efficiency Partnership (LEEP). Through the project evolution, LEEP now stands for the Local Energy Efficiency Partnership Project across Canada as it is now a nation-wide program.

The LHBA has continued its partnership with NRCan staff for follow-up projects such as LEEP Technology Adaptation Pilot (LEEP-TAP) in 2010 and LEEP for Renovators from 2017 to 2019. Sifton Properties' West 5 project, Canada's largest net-zero energy new development, can also trace its origins to the LEEP project.

The City of London is currently working with the BetterHomes Ontario consortium – a joint program of the Association of Municipalities of Ontario, Clean Air Partnership and Heating, Refrigeration and Air Conditioning Institute of Canada – to assess the feasibility of a Property-Assessed Clean Energy (PACE) style home energy retrofit program using the LIC mechanism in Ontario. Funding for this work is currently being provided by the Federation of Canadian Municipalities (FCM) Community Efficiency Financing (CEF) Studies stream, which will then be used to support the future application to the FCM CEF program for a home energy retrofit pilot project for launch in 2023. London's participation in the PACE program will be subject of a future report and Council approval.

2.0 Discussion and Considerations

This section includes details on the project partners, roles and responsibilities, an overview of the Memorandum of Understanding (MoU) and the benefits to London and others of signing the MoU.

Canadian Home Builders Association (CHBA) and London Home Builders Association (LHBA)

The CHBA project would provide the following:

- Train-the-trainer offerings and build support for net-zero training;
- Promotion of the net-zero retrofits training courses to LHBA member contractors;
- Promotion of net-zero renovator certifications within London's renovation marketplace, and
- Promotion of options for deep energy and net-zero ready retrofits within the City of London's proposed home energy retrofit pilot project customer uptake process, even if they are not part of the CHBA net-zero program, to build the demand for the retrofit market.

City of London

The City of London will leverage staff knowledge, expertise, reach and resources to contribute to this project as follows:

- The selection of up to 20 homes in London to be retrofit to net-zero energy ready standards as per the CHBA's Net Zero Home Labelling Program requirements, including insurance, warranty, and other requirements. It is anticipated that some of these participants could be drawn from the proposed FCM-funded home energy retrofit pilot program planned for launch in 2023. Municipally owned or supported projects, such as social housing, are also eligible for participation. Renovators who participate in the training may bring potential clients/projects to the City of London for consideration. Decisions regarding participant selection will be made later in 2023. Renovation work would take place in 2024.

- The time of at least one staff person from the Climate Change and Environmental Stewardship section to coordinate this effort on behalf of our municipality over the duration of the project, including:
 - confirming scope;
 - reviewing the project contract and getting it signed;
 - organizing staff participation in the project kick-off meeting, LEEP session, and training courses;
 - attending quarterly 2-hour online project stakeholder meetings;
 - communication with CHBA and communication with local stakeholders;
 - tracking and reporting to CHBA on all local in-kind contributions;
 - coordinating applicable local rebates and incentive programs for the participating homeowners; and
 - soliciting local renovator and stakeholder participation in the training sessions.
- The preparation/travel/meeting time of at least four staff people to attend a two-day face-to-face LEEP for Renovations session to be held in London. This will include staff from our Building Division who will also contribute their professional insight. The City of London can also provide a facility to host this event to help reduce overall project costs.
- The time of at least two staff people from the City's Building Division to attend the 8-hour Building Science, 8-hour Net Zero Builder and 8-hour Net Zero Renovator training courses, delivered on-line.
- The time of at least one staff person from the City's Building Division to participate in the Integrated Design Charrettes for each home to provide professional expertise and assist in the evaluation of the home(s) to meet our municipal objectives/targets and attending quarterly 2-hour online project stakeholder meetings. It will not necessarily always be the same person(s) who participates in each activity

Other Partners

BetterHomes Ontario

London's participation in the CHBA project will play a key role in training local LHBA renovators and City of London building officials on net-zero energy ready renovation methods and technologies - an activity also required to support the proposed FCM CEF funded home retrofit LIC/PACE pilot project for London being developed by BetterHomes Ontario. Having the CHBA's Net Zero Home Labelling Program "brand" will also help with program design for the upcoming proposed home retrofit LIC/PACE pilot project for London, as renovations could be undertaken following the Net Zero Program as eligible measures rather than establishing prescriptive criteria for specific measures.

Participating Municipalities

The other participating municipalities - Durham Region, Calgary, Edmonton, Ottawa, Saskatoon, and Toronto – either have existing home energy retrofit programs in place or are in the process of developing one. Learning from other municipalities that are further ahead than London on offering municipal support for home energy retrofits will be of great value to City staff.

Durham Region, Ottawa, and Toronto have already launched PACE-style home energy retrofit programs. Saskatoon has also launched their PACE-style Home Energy Loan Program (HELP). Edmonton has their existing Home Energy Retrofit Accelerator, which includes municipal incentives provided directly from the municipal government to homeowners.

Calgary is exploring the use of Alberta's Clean Energy Improvement Program (CEIP), Alberta's version of PACE financing designed to make energy efficiency and renewable energy upgrades more accessible to homeowners.

Overview of the Memorandum of Understanding (MoU)

Alongside the CHBA and other program stakeholders, the City of London will be a key member in the coordination and facilitation of this initiative within London, targeting up to 20 residential units to participate. By signing this MoU, the City of London commits to participating in this initiative with the roles and responsibilities as summarized below:

- Pre-Renovations (2022/23) - solicit local renovator and key stakeholder participation in training sessions and coordinating with CHBA (and LHBA) for the final selection of participating projects.
- Renovations (2023/24) - track and reporting on the progress of the homes being renovated.
- Post-Renovations Data Collection (2024/25) - report the results of any financing/ incentives provided to the homeowners of the homes that were renovated and share the results of how the homeowners were engaged.
- Data Analysis & Knowledge Dissemination (2025/26) - provide information for the final NRCan report and participate in knowledge dissemination activities such as educational videos, tours, webinars, and other events.

In summary, this five-year project is designed to help harmonize net-zero housing standards and requirements in Canada and shared knowledge across several provinces. The total value of this project, including in-kind time from renovators and municipal staff, is estimated at over \$24 million, with Natural Resources Canada providing \$4,467,750 towards project costs.

The City of London's role and responsibilities include a commitment to in-kind involvement and leveraging future proposed work with the BetterHomes Ontario consortium – a joint program of the Association of Municipalities of Ontario, Clean Air Partnership, and Heating, Refrigeration and Air Conditioning Institute of Canada – to assess the feasibility of a PACE-style home energy retrofit program using the LIC mechanism in London. The City's only financial commitment at this time is \$15,000 from approved funds.

City staff has asked the CHBA for small revisions to section 6.0 to clarify the City's ability to maintain confidentiality being subject to disclosure requirements under applicable law (e.g., MFIPPA, etc.) and to section 8.2 regarding limitations of liability being mutual to both the City of London and the CHBA. City staff are expecting a response from the CHBA, and minor changes may be made upon receipt from the CHBA.

Benefits of this Project and Signing the Memorandum of Understanding

The development and delivery of a national-scale training and certification process for net-zero energy ready renovations and renovators will provide benefits to the following groups:

- Londoners – will provide London homeowners with affordable options for net-zero energy ready renovations as well as additional confidence when planning for these major renovations with a trained and certified net-zero energy ready renovator.
- LHBA's (London's) Renovators – will provide the renovator members of the London Home Builders' Association with both training and certification to promote and deliver affordable and reliable net-zero energy renovation services to Londoners. Certification as a net-zero energy ready renovation service provider is expected to generate business leads for participating renovators. This project has been discussed several times during development with LHBA staff.

- City of London – will support London’s Climate Emergency Action Plan, specifically the home energy retrofit actions within Area of Focus 2 – Taking Action Now (Household Actions). Building local capacity for net-zero energy ready renovations will support the proposed FCM-funded home energy retrofit pilot project for launch in 2023, as well as retrofits that take place outside of this pilot project.
- Canadian Home Builders’ Association – will build upon and strengthen the working relationship with both the London Home Builders’ Association and the City of London on energy efficiency and climate action in the single-family housing sector.

3.0 Financial Impact/Considerations

City staff have allocated \$15,000 from the 2023 year of the 2020-2023 Multi-year Budget to assist with project implementation in London, such as education and engagement activities on the topic of net-zero ready renovations to assist with participant recruitment.

Participating homeowners will be responsible to financing their retrofit work, with assistance from existing and future planned/proposed incentives (e.g., Enbridge Gas, Canada Greener Homes) as well as funding mechanisms such as the proposed LIC/PACE home energy retrofit pilot project in London and/or Canada Mortgage and Housing Corporation’s Canada Greener Homes Loan interest-free \$40,000 loan program.

City staff will advise CHBA/LHBA that up to half of the homes (up to 10) participating in this project be drawn from City of London social housing, leveraging existing renovation work planned for the 2024 timeframe.

Additional indirect support from the City of London would involve leveraging existing and planned/proposed work, subject to Municipal Council approval, associated with developing an FCM-funded home energy retrofit pilot program for launch in 2023, involving about 50 homes per year for three years.

Conclusion

Participation in the CHBA’s “Towards cost-effective net-zero energy ready residential renovations” project supports London’s Climate Emergency Action Plan, building upon almost two decades of partnership with the London Home Builders’ Association on home energy efficiency and conservation.

Prepared by: **Jamie Skimming, P.Eng., Manager, Energy and Climate Change**

Prepared and Submitted by: **Jay Stanford, M.A., M.P.A. Director, Climate Change, Environment, and Waste Management**

Recommended by: **Kelly Scherr, P.Eng., MBA, FEC, Deputy City Manager, Environment & Infrastructure**

Recommended by: **Scott Mathers, P.Eng., MPA, Deputy City Manager, Planning & Economic Development**

Appendix A: A by-law to authorize and approve a Memorandum of Understanding between the Canadian Home Builders’ Association and The Corporation of the City of London and to authorize the Mayor and the City Clerk to execute the Memorandum of Understanding.

APPENDIX A

Bill No.
2022

By-law No. A.-

A by-law to authorize and approve a Memorandum of Understanding between the Canadian Home Builders' Association and The Corporation of the City of London and to authorize the Mayor and the City Clerk to execute the Memorandum of Understanding.

WHEREAS section 5(3) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipal power shall be exercised by by-law;

AND WHEREAS section 9 of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS it is deemed appropriate for The Corporation of the City of London (the "City") to enter into a Memorandum of Understanding with the Canadian Home Builders' Association ("CHBA") to undertake collaborative work to accelerate the deployment of high-efficiency houses and low-rise multi-unit residential buildings, targeting driving down the cost and creating market confidence in net-zero energy ready renovations;

AND WHEREAS it is deemed appropriate to authorize the Mayor and the City Clerk to execute the Memorandum of Understanding on behalf of the City;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

1. The Memorandum of Understanding between The Corporation of the City of London and the Canadian Home Builders' Association, attached as Schedule A to this by-law, is hereby authorized and approved.
2. The Mayor and the City Clerk are hereby authorized to execute the Memorandum of Understanding authorized and approved under section 1 of this by-law.
3. This by-law shall come into force and effect on the day it is passed.

PASSED in Open Council July 5, 2022

Ed Holder
Mayor

Michael Schulthess
City Clerk

First Reading – July 5, 2022
Second Reading – July 5, 2022
Third Reading – July 5, 2022

Schedule A

Memorandum of Understanding
"TOWARDS COST-EFFECTIVE NET-ZERO ENERGY READY
RESIDENTIAL RENOVATIONS"

Agreement

Between

City of London

Hereinafter called the "Municipality"

And

Canadian Home Builders' Association

Hereinafter called "CHBA"

This Agreement witnesses that in consideration of the mutual covenants and agreements contained herein, it is agreed by and between the Municipality and CHBA as follows:

1.0 STATEMENT OF WORK

The Municipality shall commit to working with CHBA to perform the work set out in the attached Schedule "A", subject to the terms and conditions herein contained and additional detail as set out in the attached Scope of Work in Schedule "A".

2.0 CONTRIBUTIONS & REIMBURSEMENTS

The Municipality shall commit to contributions outlined in Schedule "A" and will be entitled to reimbursements, as set out in the attached Reimbursements in Schedule "B".

3.0 TERM AND TERMINATION

This Agreement will commence on the date of CHBA's signature and remain in full force and effect to the conclusion of the agreement, subject to earlier termination. This Agreement may be terminated under the following circumstances:

- At any time, by notice of one party to the other, with thirty (30) days' notice; or
- Should CHBA or the Municipality materially default under this Agreement and having received notice of such material default from the non-defaulting party, fails to remedy it to the satisfaction of the non-defaulting party within ten (10) business days of the notice, in which case the termination would be effective immediately upon written notice by the non-defaulting party to the defaulting party.

4.0 DUTIES AND RESPONSIBILITIES

The Municipality shall duly and diligently perform all tasks required pursuant to this Memorandum of Understanding, and in so doing shall comply with all reasonable instructions received from the Project Manager representing CHBA.

5.0 OWNERSHIP OF MATERIALS

- 5.1 CHBA will have all ownership rights, including but not limited to all Intellectual Property Rights, in the deliverables immediately upon their creation and at every stage of their development regardless of their state of completion ("CHBA Property").
- 5.2 The Municipality will not use any CHBA Property, or any part or parts thereof, for the benefit of any party other than CHBA without the prior written consent of CHBA. For certainty, CHBA may use the deliverables in any way it sees fit. No right, interest, or title to any deliverable is reserved by the Municipality.
- 5.3 The provisions in section 5.1 and 5.2 survive any termination or expiry of this Agreement.
- 5.4 The Municipality will not distribute, publish, or disseminate CHBA Property without written consent from CHBA.

Memorandum of Understanding

Towards cost-effective net-zero energy ready residential renovations

Funded by Natural Resources Canada (NRCan), Office of Energy Research and Development, Green Infrastructure Phase II, Energy Efficient Buildings Program

6.0 CONFIDENTIALITY

As the work under this Memorandum of Understanding is considered confidential, the Municipality will not divulge results to third parties without the written consent of CHBA.

7.0 CONFLICT OF INTEREST

- 7.1 The Municipality acknowledges and agrees that it shall be a conflict of interest for it to use confidential information relevant to the services where CHBA has not specifically authorized such use.
- 7.2 The Municipality shall disclose to CHBA without delay any actual or potential situation that may be reasonably interpreted as either a conflict of interest or a potential conflict of interest, and the Municipality shall not conduct the work unless and until CHBA notifies the Municipality to proceed notwithstanding the actual, apparent or potential conflict.
- 7.3 A breach of this Section by the Municipality shall entitle CHBA to terminate the Agreement, in addition to any other remedies that CHBA has in the Agreement, in law or in equity.

8.0 GENERAL PROVISIONS

CHBA Net Zero Home Labelling Program Legal Structure and Indemnity is provided in Schedule "C".

8.1 Entire Agreement

This Memorandum of Understanding constitutes the entire agreement between the parties with respect to the subject matter hereof and cancels and supersedes any prior understandings and agreements, whether written or oral, between the parties hereto and with respect thereto. There are no representations, warranties, forms, conditions, undertakings, or collateral agreements, express, implied, or statutory between the parties other than as expressly set forth in this Agreement.

8.2 Limitation of Liability, Indemnification and Insurance

- 8.2.1 CHBA shall not be liable for any injury, death or property damage to the Municipality, its partners, directors, officers, employees, agents and volunteers or for any claim by any third party against the Municipality, its partners, directors, officers, employees, agents and volunteers.
- 8.2.2 CHBA shall not be liable for any incidental, indirect, special or consequential damages or for any loss of use, revenue or profit of the Municipality arising out of or in any way related to the Agreement or the Work.
- 8.2.3 The Municipality shall indemnify and hold harmless CHBA, its employees, servants and agents, against all costs incurred as a result of the Municipality's negligence, error, or omission related to this Agreement or the Work.
- 8.2.4 The Municipality shall be responsible for its own insurance.
- 8.2.5 The provisions in sections 8.2.1 to 8.2.4 of this agreement survive any termination or expiry of this Agreement.

8.3 Amendments and Waivers

No amendments to this Memorandum of Understanding shall be valid or binding unless set forth in writing and duly executed by both parties hereto. No waiver of any breach of any provision of this Memorandum of Understanding shall be effective or binding unless made in writing and signed by the party purporting to give the same and, unless otherwise provided in the written waiver, shall be limited to the specific breach waived. Should the Municipality's position change over time, the parties agree that this Memorandum of Understanding shall be deemed to be amended only to the extent necessary to incorporate such changes.

8.4 Notices

Any demand, notice or other communication (hereinafter referred to as a "Communication") to be given in connection with this Memorandum of Understanding shall be given in writing and may be given by personal delivery, by fax, email or by registered mail addressed to the recipient as follows:

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Towards cost-effective net-zero energy ready residential renovations

Funded by Natural Resources Canada (NRCan), Office of Energy Research and Development, Green Infrastructure Phase II, Energy Efficient Buildings Program

To the Municipality:

City of London
Attn: Jay Stanford, Director, Environment
300 Dufferin Avenue
P.O. Box 5035, London, ON N6A 4L9

To CHBA:

Canadian Home Builders' Association
Attn: Lynne J Strickland, Director, Initiatives, Net Zero Energy Housing
141 Laurier Avenue West, Suite 500
Ottawa, ON, K1P 5J3

8.5 Governing Law

This Memorandum of Understanding shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

IN WITNESS WHEREOF this Memorandum of Understanding has been executed on behalf of the Municipality by its duly authorized representative and on behalf of CHBA by its duly authorized representative on the dates set out below:

For the Municipality

Name, Title

Date

For CHBA

Sonja Winkelmann, Senior Director, Net Zero Energy Housing

Date

Memorandum of Understanding

Towards cost-effective net-zero energy ready residential renovations

Funded by Natural Resources Canada (NRCan), Office of Energy Research and Development, Green Infrastructure Phase II, Energy Efficient Buildings Program

SCHEDULE “A” SCOPE OF WORK

The definition of Memorandum of Understanding for the purpose of this initiative is a document that shows agreement to cooperate to achieve a particular objective, herein referred to as “Project Objective”.

PROJECT OBJECTIVE

The objective of this Project is to accelerate the deployment of high-efficiency houses and low-rise (Part 9) multi-unit residential buildings (MURBs) in Canada, targeting driving down the cost and creating market confidence in net-zero energy ready (NZr) renos through participation in CHBA’s Net Zero Home Labelling Program.

This innovative project will demonstrate the various approaches that can be used to achieve NZr renos in houses and low-rise (Part 9) Multi-Unit Residential Buildings (MURBs), focused on finding cost-effective solutions for multiple building archetypes, across multiple climate zones, and varying business models/ownership structures.

The project will increase local capacity and competency in the residential renovation industry by training a large number of renovators to safely renovate homes to NZr levels of performance, using CHBA members for all projects, thereby ensuring that they carry appropriate insurance and WCB, adhere to a code of ethics, provide written contracts, and obtain permits. Renovators, along with Energy Advisor and other key participants, will be trained through CHBA’s Net Zero Program to use the “house- as-a-system” approach focused on the building envelope and highly efficient technologies/equipment. This is critical to build confidence and trust with homeowners, and to protect both parties from potentially severe health and safety consequences of nondurable renovations. Non-member renovators who participate in the training can join the association and abide by its requirements to participate in the renovation projects.

DESCRIPTION OF SERVICES

Alongside CHBA and other program stakeholders, the Municipality will be a key member in the coordination and facilitation of this initiative, targeting 100-150 units across Canada between the date of this signing and March 31, 2026.

By signing this MOU, the Municipality commits to participating in this initiative with the roles and responsibilities as outlined by year below.

The Project name “Towards cost-effective net-zero energy ready residential renovations” can be referred to more concisely as “**Towards Net Zero Renos**” for the sake of brevity. These names can be used interchangeably. However, when referencing the project in a public domain, the full Project name must be used.

Key Participation Requirements

- The Municipality will identify and provide to CHBA a primary Point of Contact, herein referred to as “Municipal Lead” and other key local stakeholders such as local utilities. (CHBA will assist in identifying local and/or provincial Home Builders’ Associations, and industry members such as renovators, Energy Advisors, and product manufacturers/suppliers.)
- The Municipal Lead will be responsible for communication with CHBA and communication with its own local stakeholders.
- The Municipal Lead will be responsible for tracking and reporting to CHBA all local in-kind contributions.
- The Municipal Lead will be responsible for coordinating applicable local rebates and incentive programs for the participating homeowners.
- The Municipal Lead will identify a minimum of one member to participate in the Net Zero Renos Municipality Advisory Group. This advisory group will meet (virtually) regularly, as determined by the project requirements in consultation with the Municipalities.

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- Should the Municipal Lead designate no longer be available, the Municipality will identify and provide to CHBA a new primary Point of Contact and ensure continuity of the work under this Memorandum of Understanding.
- CHBA will be the liaison to NRCan for all inquiries, announcements, and publications. Municipalities must provide CHBA four (4) weeks' notice of any public announcements or photo opportunities related to this initiative.
- The Municipality will adhere to the branding and communications package that will be provided by CHBA to comply with CHBA commitments to NRCan under this contribution agreement.
- Renovation projects must be performed by CHBA members to ensure participants conform to CHBA's Net Zero Home Labelling Program requirements, including insurance, warranty and other requirements. See the program Legal Structure and Indemnity in Schedule "C".
- Municipalities, where applicable and feasible, are encouraged to propose a Shadow Municipality. This entails extending an invitation to another, often smaller neighbouring municipality, to partake in the CHBA training and shadow the participating municipality in the process of effecting Net Zero Renos. Shadow Municipalities would be encouraged to send their local municipality representatives, renovators and energy advisors to the CHBA training to gain the knowledge and connections to undertake Net Zero Renos in the future.

YEAR ONE: PREP

Upon Signing – MAR 31, 2022

YEAR TWO: PRE-RENOVATIONS

APR 1, 2022 – MAR 31, 2023

CHBA Commitments:

- CHBA will solicit Municipality for commitment to participate in this initiative.
- CHBA will be the lead for all industry training and projects events, home labelling, and data collection for NRCan reporting.
- CHBA will facilitate:
 - A Project Kick-off Meeting (1 day, on-line)
 - Quarterly Project Stakeholder Meetings (2 hours, on-line)
 - Year 2 Project Stakeholder Meeting (1-day, Canadian location TBD or on-line)
- CHBA will provide qualified Trainers and Facilitators to deliver the mandatory training and project events per below:
 - CHBA Building Science Training (8 hours, in-person or on-line TBD)
 - CHBA Net Zero Builder Training (8 hours, in-person or on-line TBD)
 - CHBA Net Zero Renovator Training (8 hours, in-person or on-line TBD)
 - CHBA LEEP (Local Energy Efficiency Partnerships)¹ for Renovations (2 days, hosted by local HBA)
 - Integrated Design Charettes (1 per home/MURB)
- CHBA will assist Municipality in developing communication strategies, and selection of participating projects (homes/MURBs) to align with NRCan, CHBA and Municipal selection criteria, including archetypes.

Municipality Commitments:

- The Municipal Lead will represent the interests of the Municipality, and ensure the work identified in this Memorandum of Understanding is executed, including ensuring this Memorandum of Understanding is internally reviewed and sign-off is secured.
- The Municipality will be the lead for any/all homeowner interaction, including coordinating with CHBA for the final selection of participating projects (homes/MURBs). **Only CHBA Renovators and Energy Advisors will conduct and oversee the renovation projects selected.**
- If not selecting a municipally owned project, there will be a need to secure qualified renovation projects. Renovators who participate in the training may bring potential clients/projects to the Municipality for consideration. If there is an insufficient number of projects through the renovators themselves, the Municipality may conduct a Call for Applications to solicit projects (homes/MURBs) in their region. Preferred archetypes will be identified and targeted, homeowner engagement strategies will be developed, and available/applicable financing/funding opportunities will be communicated. The Municipality will screen the applications and make the final candidate selection with support from CHBA and other key regional stakeholders such as Energy Advisors.

¹ See www.chba.ca/LEEP for more information.

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Towards cost-effective net-zero energy ready residential renovations

Funded by Natural Resources Canada (NRCan), Office of Energy Research and Development, Green Infrastructure Phase II, Energy Efficient Buildings Program

- The Municipality, informed by local stakeholders, will identify specific local barriers to NZr Renovations and engage with project stakeholders to develop strategies to overcome them.
- In addition to the CHBA, the Municipality will also solicit local renovator and key stakeholder participation in the training sessions with the intent of increasing local industry capacity and qualifying more Renovators and Energy Advisors via the CHBA Net Zero Home Labelling Program.
- The Municipality will provide at least one appropriate staff person to participate in each of the mandatory training courses and project events to contribute their professional insight.
 - A Project Kick-off Meeting (1-day, on-line)
 - Quarterly Project Stakeholder Meetings (2 hours, on-line)
 - Municipal Advisory Group Meetings (1-2 hours, bi-monthly during Year Two)
 - Year 2 Project Stakeholder Meeting (1-day, Canadian location TBD or on-line)
 - CHBA Building Science Training (8 hours, in-person or on-line TBD)
 - CHBA Net Zero Builder Training (8 hours, in-person or on-line TBD)
 - CHBA Net Zero Renovator Training (8 hours, in-person or on-line TBD)
 - CHBA LEEP (Local Energy Efficiency Partnerships) for Renovations (2 days, hosted by local HBA)
 - Integrated Design Charettes (1 per home/MURB) *Optional for Municipality unless participating as Owner*

YEAR THREE: RENOVATIONS

APR 1, 2023 – MAR 31, 2024

CHBA Commitments:

- CHBA will provide support for the Net Zero training, LEEP sessions, Integrated Design Charettes, home labelling, and data collection for NRCan reporting.
- CHBA will facilitate:
 - Quarterly Project Stakeholder Meetings (2 hours, on-line)
 - Municipal Advisory Group Meetings (2 hours, bi-annually)
 - Annual Project Stakeholder Meeting (1-day, Canadian location TBD or on-line)

Municipality Commitments:

- The Municipality will track and reporting on the progress of the homes being renovated.
- The Municipality will provide at least one appropriate staff person to participate in the project events to contribute their professional insight:
 - Quarterly Project Stakeholder Meetings (2 hours, on-line)
 - Municipal Advisory Group Meetings (2 hours, bi-annually)
 - Annual Project Stakeholder Meeting (1-day, Canadian location TBD or on-line)

YEAR FOUR: POST-RENOVATIONS DATA COLLECTION

APR 1, 2024 – MAR 31, 2025

CHBA Commitments:

- CHBA will provide support for any ongoing home labelling and data collection for NRCan reporting.
- CHBA will facilitate:
 - Quarterly Project Stakeholder Meetings (2 hours, on-line)
 - A LEEP Innovation Exchange session for all project participants (1-day, Canadian location TBD or on-line)
 - Municipal Advisory Group Meetings (2 hours, bi-annually)
 - An Annual Project Stakeholder Meeting (1-day, Canadian location TBD or on-line)

Municipality Commitments:

- The Municipality will:
 - Report the results of any financing/incentives provided to the homeowners of the homes that were renovated.
 - Share the results of how the homeowners were engaged.
 - Attend any ribbon cutting ceremonies.
- The Municipality will provide at least one appropriate staff person to participate in the project events to contribute their professional insight:
 - Quarterly Project Stakeholder Meetings (2 hours, on-line)

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- A LEEP Innovation Exchange session for all project participants (1-day, Canadian location TBD or on-line)
- Municipal Advisory Group Meetings (2 hours, bi-annually)
- An Annual Project Stakeholder Meeting (1-day, Canadian location TBD or on-line)

YEAR FIVE: DATA ANALYSIS & KNOWLEDGE DISSEMINATION

APR 1, 2025 – MAR 31, 2026

CHBA Commitments:

- CHBA will provide support for any ongoing home labelling and data collection for NRCan reporting. Data analysis and toolkit development will be completed.
- CHBA will facilitate:
 - Knowledge Transfer & Dissemination activities
 - Quarterly Project Stakeholder Meetings (2 hours, on-line)
 - An Annual Project Stakeholder Meeting (1-day, Canadian location TBD or on-line)

Municipality Commitments:

- The Municipality will provide at least one appropriate staff person to participate in the project events to contribute their professional insight:
 - Quarterly Project Stakeholder Meetings (2 hours, on-line)
 - An Annual Project Stakeholder Meeting (1-day, Canadian location TBD or on-line)
- The Municipality will:
 - Provide information for the final NRCan report.
 - Participate in knowledge dissemination activities, promoting the projects results by:
 - Posting information on their website
 - Sending information to their network through emails/newsletters
 - Participate in the making of videos, webinars and educational events
 - Provide/participate in tours
 - Attend local industry/media events
 - Share information via social media

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SCHEDULE “B” REIMBURSEMENT SCHEDULE

Note: Rates adhere to those set by National Joint Council (NJC) [Appendix C - Allowances - Modules 1, 2 and 3 \(njc-cnm.gc.ca\)](http://njc-cnm.gc.ca)

Tasks	Reimbursement Schedule
Year One: Project Prep (Upon signing to Mar 31/22)	
Task 1.1 - Confirm Project Partners & Consultants - Project Kickoff Meeting (1 day, on-line)	N/A
Task 1.2 - Confirm Target Archetypes	N/A
Task 1.3 - Project Stakeholder Meetings - Quarterly Meetings (2 hours, on-line)	N/A
Task 1.4 - LEEP for Renos - LEEP for Renos session (2 days, hosted by local HBA)	Up to 4 staff reimbursed up to \$200 per event for travel/meal expenses per NJC Allowances ; additional attendees optional at Municipality’s expense.
Task 1.5 - Training: - CHBA Building Science Training (8 hours, in-person or on-line TBD) - CHBA Net Zero Builder Training (8 hours, in-person or on-line TBD) - CHBA Net Zero Renovator Training (8 hours, in-person or on-line TBD)	If in-person, up to 1 staff reimbursed up to \$200 per course for travel/meal expenses per NJC Allowances ; additional attendees optional at Municipality’s expense.
Year Two: Pre-Renovations (Apr 1/22 to Mar 31/23)	
Task 2.1 - Training - CHBA Building Science Training (8 hours, in-person or on-line TBD) - CHBA Net Zero Builder Training (8 hours, in-person or on-line TBD) - CHBA Net Zero Renovator Training (8 hours, in-person or on-line TBD)	If in-person, up to 1 staff reimbursed up to \$200 per course for travel/meal expenses per NJC Allowances ; additional attendees optional at Municipality’s expense.
Task 2.2 - Call For Renovation Applications	N/A
Task 2.3 - Selecting Renovation Projects	N/A
Task 2.4 - Renovation Optimizations - Quarterly Meetings (2 hours, on-line) - CHBA LEEP for Renos session (2 days, hosted by local HBA) - Annual Meeting (2 days, in-person or on-line TBD)	For LEEP for Renos: up to 4 staff reimbursed up to \$200 per event for travel/meal expenses per NJC Allowances ; additional attendees optional at Municipality’s expense. For Annual Meeting: if in-person, up to 1 staff reimbursed up to \$2,000 per trip for travel/meal expenses per NJC Allowances ; additional attendees optional at Municipality’s expense.
Year Three: Renovations (Apr 1/23 to Mar 31/24)	
Task 3.1 - Renovations	N/A
Task 3.2 - Testing, Verification & Labelling	N/A
Task 3.3 - Incentives/ Rebate Disbursements - Quarterly Meetings (2 hours, on-line) - Annual Meeting (2 days, in-person or on-line TBD)	For Annual Meeting: if in-person, up to 1 staff reimbursed up to \$2,000 per trip for travel/meal expenses per NJC Allowances ; additional attendees optional at Municipality’s expense.
Year Four: Post-Renovations (Apr 1/24 to Mar 31/25)	
Task 4.1 - Data Collection - Quarterly Meetings (2 hours, on-line) - Annual Meeting (2 days, in-person or on-line TBD)	For Annual Meeting: if in-person, up to 1 staff reimbursed up to \$2,000 per trip for travel/meal expenses per NJC Allowances ; additional attendees optional at Municipality’s expense.
Year Five: Knowledge Transfer and Dissemination (Apr 1/25 to Mar 31/26)	
Task 5.1 - Data Analysis	N/A
Task 5.2 - Report/Tool Development	N/A
Task 5.3 - Knowledge Transfer & Dissemination - Quarterly Meetings (2 hours, on-line) - Annual Meeting (2 days, in-person or on-line TBD) - Municipality to host local event for sharing results (1-day, in-person or on-line TBD)	For Annual Meeting: if in-person, up to 1 staff reimbursed up to \$2,000 per trip for travel/meal expenses per NJC Allowances ; additional attendees optional at Municipality’s expense. For Local event: if in-person, CHBA will cover up to \$6,000 towards expenses to host local event.

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SCHEDULE "C" LEGAL STRUCTURE AND INDEMNITY

Program participants are encouraged to use this language in their home renovation contracts.

1. The **CHBA Net Zero Home Labelling Program** (the Program) recognizes builders, renovators and service professionals who commit to meet its Program Requirements and recognizes houses that these builders, renovators and service professionals attest to meeting the Program's Technical Requirements.
2. The **Canadian Home Builders' Association** (the CHBA) is a national not-for-profit organization with voluntary membership comprising new home builders, renovators, developers, trades, manufacturers, suppliers, lenders and other professionals. CHBA is not a construction company, warranty organization, certification or standards body in any way. The CHBA provides this Program to help interested homebuyers identify net zero builders, renovators and homes, and to support its members who are looking to provide these homes to homebuyers and homeowners.
3. The **CHBA Net Zero Home Labelling Program Technical Requirements** (the Technical Requirements) use the standards developed by the Department of Natural Resources Canada (NRCan), of the Government of Canada, that can be used to build to net zero or net zero ready performance under the following programs:

Issuing Agency	Document	Reference
NRCan	EnerGuide Rating System (ERS) v15	ISBN 978-1-100-25693-1
NRCan	ENERGY STAR® for New Homes (ESNH) Standard v12 or v17	M144-237/2012-6E-PDF or ISBN 978-1-100-25853-9
NRCan	2012 R-2000 Standard	M144-223/2012E-PDF
CHBA	Net Zero Home Labelling Program for New Homes Technical Requirements	
CHBA	Net Zero Home Labelling Program for Renovations Technical Requirements	
CHBA	Net Zero Home Labelling Program Technical Procedures Guidebook	

4. Net Zero/Ready Homes shall **comply with the applicable building codes and regulations**, in addition to the requirements of this Program. This Program is not a substitute for local, provincial, or territorial building codes; it is an additional set of requirements that are intentionally more stringent in the areas of energy efficiency and net energy consumption.
5. A **CHBA Qualified Net Zero Home and a CHBA Qualified Net Zero Ready Home** that is labelled under the Program is a home that is recognized by CHBA, on the basis of the attestations (by the builder/renovator, its Qualified Net Zero Service Organization and a Qualified Net Zero Energy Advisor) to have met the Technical Requirements, including the energy performance rating using NRCan's EnerGuide Rating System (ERS).
6. A **CHBA Qualified Net Zero Service Organization** (the Service Organization) must meet the ongoing requirements of the Program, including being licensed through NRCan to deliver EnerGuide, and ENERGY STAR® or R-2000. See above for more information on the Service Organization requirements for qualification under the Program.
7. A **CHBA Qualified Net Zero Energy Advisor** (the Energy Advisor) must meet the ongoing requirements of the Program, including being registered through NRCan to deliver EnerGuide and ENERGY STAR® or R-2000. See above for more information on the Energy Advisor requirements for qualification under the Program.
8. A **CHBA Qualified Net Zero Trainer** (the Trainer) must meet the ongoing requirements of the Program, including being licensed through NRCan to deliver training for ENERGY STAR® and/or R-2000. See above for more information on the Trainer requirements for qualification under the Program.

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9. A **CHBA Qualified Net Zero Renovator** (the Renovator) must meet the ongoing requirements of the Program, including being a RenoMark® Renovator. See above for more information on the Renovator requirements for qualification under Program.
10. **HOT2000** is an energy simulation and design tool for low-rise residential buildings developed and managed by the Office of Energy Efficiency at Natural Resources Canada. HOT2000 supports Natural Resources Canada's EnerGuide Rating System (ERS), ENERGY STAR for New Homes (ESNH) and R-2000 energy efficiency residential programs. The v15 ERS scale gives a consumption-based rating measured in gigajoules (GJ) per year using version 11 of HOT2000, as compared to the previous 0-100 scale.
11. The **energy performance rating** required for recognition under the Program means that the house has been rated to achieve a net zero energy consumption rating equal to or less than zero gigajoules (0 GJ) per year using version 11 of HOT2000, and other program requirements.
12. **Service Professionals' Attestation:** The Energy Advisor and Service Organization review the home design and construction and attest that it meets the Program's Technical Requirements. Any digressions from the design, testing, construction and evaluation procedures for a given house are the exclusive responsibility of the Energy Advisor and the Service Organization. CHBA in no way warrants the work of the Service Professionals on any given house.
13. It is the **Builder's or Renovator's responsibility** to ensure the house meets the Technical Requirements (including the energy performance rating using NRCan's ERS) on the basis of the work by the Service Professionals, and that the house meets any and all applicable local building codes and standards. The builder attests that the home has been built to meet the Program's Technical Requirements, and any digressions therefrom are the exclusive responsibility of the builder. ***The contract for the home's construction is exclusively between the builder or renovator and the Purchaser of the home or, in the case of a renovation, the homeowner.***
14. **Warranty: CHBA members are required to register all their homes with a warranty provider**, including their Net Zero/Ready Homes.
15. CHBA is not a warranty organization and as such **CHBA in no way warrants** construction or renovation of the house or its energy performance. The Net Zero/Ready Home label is in no way a warranty. CHBA does not conduct its own construction, renovation, or evaluation, and does not take responsibility for the performance or accuracy thereof, or for any responsibilities (contractual or otherwise) to the Purchaser of the home or in the case of a renovation, the homeowner.
16. **Actual Energy Consumption** will vary according to occupant behaviour, actual fluctuating yearly climatic conditions, and other factors. As such, the rating is specifically not a prediction of net zero energy consumption or zero energy cost in any given year. It is instead a rating of the net annual energy use of the home, in an average climatic year, based on assumed standard occupancy, occupant energy loads, and operating conditions according to NRCan's ERS. Occupant factors, such as the number of occupants, occupant behaviour, and occupant selected and controlled appliances and electronics, as well as climatic conditions (e.g. temperature, solar radiance) will vary and affect the actual annual energy consumption and production of the home.
17. **Ongoing maintenance** to ensure optimum performance is solely the responsibility of the homeowner(s).
18. **The rating is predicated** on the data and standards specifically at the time of the evaluation, and not at a later date.
19. Per all the above, achieving **net zero energy consumption in any given year is not, and cannot be guaranteed** by the builder, renovator, Natural Resources Canada, the Service Organization, Energy Advisor, or CHBA. Under the varying conditions that will be experienced, the house may use more or less energy than the rating.