

The Deep Retrofit Challenge (the Challenge) is a City of Toronto funding program that intends to incentivize and support deep retrofit projects (Deep Retrofit Project) that will significantly reduce greenhouse gas emissions in approximately 10 to 16 buildings (Building) located in Toronto. Each Building's Deep Retrofit Project selected to participate will serve to demonstrate to other building owners in Toronto the deep retrofits needed to move buildings towards net zero emissions, with the goal of accelerating market adoption. The Challenge is supported by a grant from Natural Resources Canada.

Within this City of Toronto Deep Retrofit Challenge Application Form the Building owners who will be submitting this Application Form will be referred to as either "you", the "Building Owner", or the "Applicant".

Prior to completing this Application Form, you must review the **Deep Retrofit Challenge Applicant Guide** (Applicant Guide) on the Deep Retrofit Challenge website to ensure each section of the Application Form is completed correctly. The Application Form and all the documents you submit with the Application Form will make up the "Application". The City strongly advises that you check the website to review the latest updates and Questions and Answers document. During the Application intake period City staff are unable to meet privately with an Applicant interested in participating in the Challenge. Please sign up for one of the many information sessions that will take place during the Application intake period, visit our website for more details.

To assess whether you are eligible to participate in the Deep Retrofit Challenge please check your proposed Deep Retrofit Project and Building's eligibility under **Section A - Eligibility Checklist** prior to submitting your Application.

The deadline to submit your Application is October 31, 2022, by 5:00pm (Eastern Standard Time).

Submitting an Application to participate in the Challenge is not a guarantee of participation. The City, through its **Better Buildings Partnership** will be evaluating each Application submitted based on the criteria outlined in **Section 7 of the Applicant Guide**. Depending on available funding and suitable Applications submitted, up to sixteen (16) Applicants may be chosen to participate and become "Participants" in the Challenge.

Questions? Please submit your question about the Challenge to bbp@toronto.ca using your business email account.

Staff will respond to your question within three business days. Staff will post the question and response to the publicly available Questions and Answers document located on the Deep Retrofit Challenge website. The document will be updated with new questions and answers on a weekly basis.

The question period will close on October 21, 2022, at 5:00pm (Eastern Standard Time). After the question period closes, the City will no longer accept and answer any new questions.



A - Eligibility Checklist

By checking each box in the following Eligibility Checklist, you acknowledge that your proposed Building and Deep Retrofit Project under this Application Form meet the eligibility criteria required to be considered as a potential participant in the Challenge. If you do not meet one of the following criteria, you acknowledge that your Building and/or Deep Retrofit Project is not eligible to participate in this Challenge and the City advises that you do not proceed with completing an Application Form.

Building Eligibility Criteria

A Building that is eligible to be considered for the Deep Retrofit Project Challenge must meet the following criteria:

1.	Located within the boundary of the City of Toronto (Postal code begins with 'M')

2.	An Ontario Building Code Part 3 building (i.e. greater than 600m ² or three storeys) that can be
n	described as one of three property types. Select type below.

a) Multi-unit residential building (including condominium, apartment, etc.)
b) Commercial office building.
c) Mixed use building (residential and commercial, including residential over commercial).

Deep Retrofit Project Eligibility Criteria

The Deep Retrofit Project that is eligible to be considered for the Deep Retrofit Project Challenge must meet all of the following criteria:

1.	Achieve a minimum 50 per cent reduction in greenhouse gas emissions (operational emissions).
2.	Achieve a minimum 50 per cent reduction in total energy use intensity.
3.	Demonstrate a 20-year payback period or better.
4.	Use a comprehensive whole-building analysis approach to deep retrofits.
5.	Meet complete the Deep Retrofit Project and be operational on or before January 31, 2025.
6.	Be a retrofit of an existing building that has been occupied (not vacant) within the 12 months prior to the Application submission.
7.	Must not have commenced the retrofit and/or construction phase of their Deep Retrofit Project.
8.	Must be able to demonstrate ability to fund the project

Participant Obligations

By checking the following boxes, the **Applicant acknowledges and agrees**, that in the event that its **Deep Retrofit Project is chosen to participate in the Deep Retrofit Challenge**, in order to be a **Participant in the Challenge the Applicant will be required to**:

Please check (✓) to confirm

Enter into the Deep Retrofit Challenge 'Participant Agreement' as found on the Deep Retrofit Challenge <u>website</u> .		
Provide a calibrated pre- and post- retrofit energy model using EnergyPlus, EQuest, or similar software		
Participate in a design charrette and other workshops or training organized by the City to identify various energy and environmental improvements that may be achieved with their deep retrofit including opportunities to advance the design.		
Agree that the City can make the details of the Deep Retrofit Project publicly available, including utility energy use and costs, designs, and project costs, to help drive uptake of similar retrofits. Deep Retrofit Projects will be featured in case studies and recognized by		
the City for early transformative action.		
Calculate and report on projected embodied carbon for major construction materials during the design phase (embodied carbon will not be factored into the performance incentive calculation) and prepare a plan to minimize embodied carbon during the retrofit.		
Not apply for any rent increases above the guideline as identified in the Residential Tenancies Act in connection with any portion of improvements funded through the challenge		
Allow the City to make all decisions respecting the disposition of the emission reduction credits attributable to the Deep Retrofit Project.		
Submit quarterly Progress Reports to the City throughout the Deep Retrofit Project Term.		
Grant the City of Toronto access to the Building to verify progress status, support creation of knowledge sharing products, or similar activities.		
Provide a minimum of one year of pre-retrofit utility data for the Building.		
Provide a minimum of five years post-retrofit utility data for the Building.		
Design and implement the retrofit using an approach that is replicable to similar building types across the city of Toronto and across similar climates within Canada.		
Participate in City media event(s) and/or advertising campaigns promoting the Deep Retrofit and the Participant's Deep Retrofit Project, including the building, technologies, etc.		
Participate in the initial cohort of volunteers for the <u>Net Zero Existing Buildings Strategy</u> 3, which include:		
 Report annual emissions (and energy) performance, public disclosure, and labelling Meet greenhouse gas emissions performance targets Perform energy and emissions audits and tune-ups (at regular intervals) 		

B - Building Owner Information

Instructions:

- All businesses and/or individuals listed as owners on the registered title for the Building property (the "Building Owner(s)") must be identified and consent to participate in the Challenge by signing this Application Form.
- 2. Please indicate all Building Owner(s):
 - a. If a Building Owner is a business, please provide the full legal name of the business and HST number of the business found on the title to the Building property and also provide the Legal Name, Position Title, and email address of the person(s) that has legal authority to commit and bind the business.
 - b. If a Building Owner is an individual, please provide the full legal name found on the title to the Building property.
- 3. If First Name and Last Name do not apply to you because you have either a registered Birth Certificate or Change of Name Certificate bearing a Single Name, provide your Single Name.
- 4. If further space is required, please attach a separate sheet.

Building Owner 1 Legal Name (First, Last or Single)				
Business Mailing Address (Street Number and Street Na	me)	Suite/Unit Number		
City/Town	Province	Postal Code		
Business Telephone Number	Business Email			
Complete if business – Add Name and Position Title of person(s) that has authority to legally commit and bind Building Owner 1:				
Name (First, Last or Single)	Position Title			
Business Telephone Number	Business Email			

Building Owner 2 Legal Name (First, Last or Single)			
Business Mailing Address (Street Number and Street Nan	ne)	Suite/Unit Number	
City/Town	Province	Postal Code	
Business Telephone Number	Business Email		
Complete if business - Add Name and Position Title of person(s) that has authority to legally commit and bind Building Owner 2			
Name (First, Last or Single)	Position Title		
Business Telephone Number	Business Email		

Building Owner 3 Legal Name (First, Last or Single)		
Business Mailing Address (Street Number and Street Nar	ne)	Suite/Unit Number
City/Town	Province	Postal Code
Business Telephone Number	Business Email	
Complete if business – Add Name and Position Title of pe bind Building Owner 3:	rson(s) that has a	uthority to legally commit and
Name (First, Last or Single)	Position Title	
Business Telephone Number	Business Email	

C - Building Owner Application Representative Information

Check this box if the Building Owner does not have an Application Representative and skip to Section D - Building Information				
Check this box if the Building Owner has a designated person that will manage the Building's Deep Retrofit Challenge Application and the Deep Retrofit Project if they are accepted to participate in the Challenge, and complete this section.				
Business Name (if applicable)			Position Title	
First Name		Last Name		
Check this box if First Name and Last Name do not apply to you because you have either a registered Birth Certificate or Change of Name Certificate bearing a Single Name. If so, provide your Single Name below				
Single Name				
Relationship to the Building Owner(s)				
Consultant / Manager / Other (please specify)				
Business Mailing Address (Street Number and Street Na		me)	Suite/Unit Number	
City/Town	Province		Postal Code	
Business Telephone Number	Business Email			

D – Building Information

Building Type (must be greater than 600m² or three storeys). Select type below.

a) Multi-unit residential building (including condominium, apartment, etc.)

b) Commercial office building.

c) Mixed-use building (residential and commercial, including residential over commercial).

Building Information

Building Legal Description

Building Name (optional)

Property Address (Street Number, Street Name and Suite/Unit Number)

City/Town	Province	Postal Code		
Property Assessment Roll Number (21 digits)				
Gross Floor Area (m ²)		Number of Units		
Number of Storeys				
Number of Occupants		Year Built (yyyy)		

E - Status of Building's Deep Retrofit Project

Please indicate the status of the Deep Retrofit Project for the Building. Check all that apply.

In early stage of exploring options	Have a specific list of desired improvements		
Have developed a detailed scope of work			
Have a Feasibility Study or Detailed Engineering Design undertaken by a qualified consultant. If checked, please attach the Feasibility Study and/or Detailed Engineering Design to the Application Form as Attachment 1 - Feasibility Study or Detailed Engineering Design.			

F - Deep Retrofit Project Details

The Applicant must submit the following as Attachment 3 - Deep Retrofit Project Details.

Step 1

Provide the following descriptions of your proposed Deep Retrofit Project:

1. Description of Building (current state) (2000 words max)

a) In addition to the descriptive narrative of the Building, submit the most recently completed Building Condition Assessment. For buildings that have not completed a Building Condition Assessment in the past, provide a letter signed by the Building Owner(s) identifying that the Building does not have a completed Building Condition Assessment.

2. Description of planned Deep Retrofit Project detailing work to be carried out, including how it will be done and by whom. Articulate the approach, goals, how the Challenge requirements will be met (see **Section A- Eligibility Checklist**), what makes the proposed Deep Retrofit Project a good case study for inclusion in the Deep Retrofit Challenge and highlight any measures incorporated into the Deep Retrofit Project that support other elements of the City's TransformTO Net Zero Strategy (e.g. electric vehicles, active transportation, waste reduction and diversion, etc.). (2000 words max)

3. If this Application is for a specific component of a larger, multi-component project or broader initiative, please explain the role of the proposed work and its relationship to the broader initiative. (500 words max)

4. Describe how the Applicant will publicize and promote their Deep Retrofit Project. (500 words max)

5. Please describe the Applicant's proposed risk mitigation strategy in terms of technical risk, business risk and other risks. Demonstrate that you understand the risks at various stages of the Deep Retrofit Project development and that there is a well thought out plan to execute the Deep Retrofit Project in such a manner that risk is mitigated to a reasonable degree. (2000 words max)

Step 2

Please complete the Table 1 in Attachment 3 to provide details about the retrofit work you intend to complete at the Building for the proposed Deep Retrofit Project. For a list of Eligible Costs under the Deep Retrofit Challenge, please refer to **Section 4.8 in the Applicant Guide.** All eligible retrofit work as a part of your Deep Retrofit Project under the Challenge shall be identified in an Energy Assessment Report (ASHRAE Level 2 Energy Audit), see Section K - Energy Assessment Report in this Application. The list of retrofit improvements provided to the City in the Application does not need to be the final list.

G - Deep Retrofit Project- Estimated Reductions

As Attachment 4 - Estimated Reductions, please submit supporting documentation illustrating how the following estimations were calculated for the Building and provide all input data. All Deep Retrofit Projects must demonstrate a minimum 50 per cent reduction in Total Energy Use Intensity and greenhouse gas emissions for the Building.

Enter estimated percentage reduction below.	Estimated %
Estimated reduction in Total Energy Use Intensity (in percentage)	
Estimated reduction in greenhouse gas emissions (in percentage)	

H - Project Budget

Please provide a **project budget and payback period calculation** for the Deep Retrofit Project and attach to this Application Form as Attachment 5 - Detailed Deep Retrofit Project Budget. The project budget should include estimated costs for the following. Please check (\checkmark) to confirm

Project Design	Commissioning
Project Management	Training (if required)
Construction/Implementation	Monitoring and reporting

I - Deep Retrofit Project Financial Details

If applicable, please list other funding received or applied for to fund this Deep Retrofit Project:

Planned Deep Retrofit Project Cost	Amount (\$)	
Please check (✓) to confirm		
Financing Loan	Amount (\$)	Source
Government Grant	Amount (\$)	Source
Assistance from Energy Management Firm	Amount (\$)	Source
Other (please specify)	Amount (\$)	Source
Other (please specify)	Amount (\$)	Source
Other (please specify)	Amount (\$)	Source

J - Organization Financial Details

Disclosure of City Loans and Guarantees

If Yes, please provide the following details:
Program Name
Amount (\$)
Date Received (yyyy-mm-dd)
If Yes , please provide details:

K- Energy Assessment Report

All deep retrofit measures eligible under the Challenge that you intend to pursue (and identified in Section F - Deep Retrofit Project Details) must be identified in an Energy Assessment Report (energy audit) completed by a qualified energy auditor that meets the criteria stated in **Section 6.11 in the Applicant Guide.**

The Energy Assessment Report must be submitted together with this Application Form, as **Attachment 2** - Energy Assessment Report (Audit).

The Energy Assessment Report should be generally equivalent to an ASHRAE Level 2 audit and must contain the following elements and meet the following conditions. Please check (\checkmark) to confirm.

1.	Was conducted by a qualified energy auditor.		
2.	Includes the following baseline energy use information for the building:		
	A minimum period of 12 months. A broakdown of building operative must be provided		
	 A breakdown of building energy use must be provided. Analysis of energy consumption for beging degree days and eacling degree days must be 		
	 Analysis of energy consumption for heating degree days and cooling degree days must be provided. 		
	 Baseline water use information should be provided if water improvements are recommended. 		
3.	Specifies recommended energy efficiency improvements, water conservation improvements and/or renewable technologies improvements.		
4.	Indicates anticipated energy consumption (expressed as a quantity and a percentage) and cost savings for the recommended improvements.		
5.	Specifies cost range of each of the recommended improvements.		
6.	Indicates potential eligibility for incentives related to the recommended improvements.		
7.	Specifies the expected useful life (the estimated measure lifetime) of each improvement.		
	rgy Assessment Report Date (yyyy-mm-dd)		
Ene	rgy Auditor Name (First, Last or Single)		
Cert	ification (i.e. CEA, P.Eng, etc.) and License		
Num	ber		
Ene	Energy Auditor Company Name		
Business Mailing Address (Street Number, Street Name, Suite/Unit Name, City/Town, Postal Code)			
Busi	ness Telephone Number Business Email		
	L - Project Management		

Please attach a project management plan to this Application Form, as **Attachment 6** - Project Management Plan, which contains the following information: **Please check (** \checkmark **) to confirm**

Project Management team and qualifications (mandatory)	Project Milestones and Timeline (mandatory)
Scope of Work (mandatory)	Project Risk Management Plan (if available)
Work Plans (if available)	Project implementation and control plan (if available)

M – Incentives

Local utility companies and others offer a number of incentives that support energy improvements for buildings. Some details included in **Section 6.13 of the Applicant Guide**. Please indicate the status of any application, and/or intention to apply for incentives, in connection with the proposed Deep Retrofit Project. **Mark an 'X' in the table below.**

Utility Company	I have applied	l intend to apply	I do not intend to apply
Toronto Hydro Incentives			
Enbridge Gas Incentives			
Other (specify)			
Other (specify)			

N - Attachment Checklist

Please check the boxes to indicate that the required attachments for the **Deep Retrofit Challenge Application Form** have been included. Application Forms that do not include the following attachments may be rejected. The City may contact the Applicant for further clarification.

√	Information to Provide	Instructions
	Attachment 1: Feasibility Study or Detailed Engineering Design	If a feasibility study has been conducted and/or an engineered design for the proposed Deep Retrofit Project is available, please submit this as Attachment 1 . If this information is not available, please provide an estimated cost to complete a feasibility study and engineered design by a qualified contractor. See also Section E of the Application Form .
	Attachment 2: Energy Assessment Report (audit)	Submit the Energy Assessment Report completed by a qualified energy auditor that meets the criteria stated in Section 6.11 of the Applicant Guide. See also Section K of the Application Form.
	Attachment 3: Deep Retrofit Project Details	Complete and submit the Table provided in Attachment 3 Cover Page along with the requested descriptions in Section F of the Application Form and a Building Condition Assessment (optional).
	Attachment 4: Estimated Reductions	Provide supporting documentation for the estimated reduction in Total Energy Use Intensity and greenhouse gas emissions (e.g. formula, inputs/outputs and emission factors). See Section G of the Application Form and Section 6.7 of the Applicant Guide.
	Attachment 5: Detailed Deep Retrofit Project Budget	Submit a detailed Deep Retrofit Project budget and payback period calculation, along with supporting documentation. Further details on the budget can be found in the Section 6.8 of the Applicant Guide or Section H of the Application Form. Details about the payback period calculation can be found in Section 6.1.2 of the Applicant Guide under 'Payback Period'.
	Attachment 6: Project Management Plan	Submit as Attachment 6 , a project management plan. See also Section L of the Application Form.
	Attachment 7: Utility Data (12 months)	Submit 12 consecutive months of utility data (i.e. electricity, natural gas, water) up until the month of the Application Form is submitted for the Building. See Section 6.1.3 of the Applicant Guide (under 'Pre-Retrofit and Post-Retrofit Data').

O - Consent to Be Contacted For Other City Programs (optional)

Yes By selecting 'Yes' in this section, in the event your Application is not selected for the Deep Retrofit Challenge the Applicant consents to having their Application shared with other City of Toronto programs such as the Energy Retrofit Loan, Navigation and Support Services, High-Rise Retrofit Improvement Support, or Taking Action on Tower Renewal (the "City Programs") and to possibly be contacted with information on potentially available funding and/or support for their building from these other City Programs.

P - Applicant Acknowledgements and Agreements

The Applicant acknowledges, agrees, and consents that by submitting an Application to participate in the Deep Retrofit Challenge, whether or not its Application is ultimately accepted to participate in the Deep Retrofit Challenge, to the following provisions:

#	✓	Please check (\checkmark) to confirm	
1.		Limited Participants : That the number of participants accepted by the City of Toronto into the Deep Retrofit Challenge is limited based on available resources and funding.	
2.		Rejection of Application: The City may reject an Application for any reason at its sole discretion.	
3.		Eligibility Criteria: To be eligible to participate in the Deep Retrofit Challenge, the Applicant must meet the Eligibility Criteria outlined in Section A of this Application Form.	
4.		Accurate and Complete: The Applicant declares that the information in this Application Form is accurate and complete in all material respects.	
5.			

Арр	Applicant Acknowledgements and Agreements			
#	✓	Please check (\checkmark) to confirm		
6.		No Personal Information: That all of the information provided in the Application is business information and that the Applicant has not submitted any personal information under the Application to the City as defined under Municipal Freedom of Information and Protection of Privacy Act.		
7.		No Liability: the City will have no liability to any person, including any building owner or building owners, for any damage, costs, liabilities, losses, or expenses, or loss of profit, loss of opportunity, or loss or reputation arising out of or otherwise relating to this application and the participation of any such person in this application process.		

Q - Applicant Signature(s)

Instructions: All Building Owners are required to sign the Application Form If further space is required, please attach a separate sheet.

I /We have authority to bind the Building Owner(s)

Building	Name of Building Owner or Authorized	Position Title of Building Owner or
Owner	Representative	Authorized Representative
•	(First, Last or Single Name)	(if applicable)

Building	Name (First, Last or Single)	Position Title
Owner 1		
Signature	Sign/Digital signature	Date (yyyy-mm-dd)

Building Owner 2	Name (First, Last or Single)	Position Title
Signature	Sign/Digital signature	Date (yyyy-mm-dd)

Building Owner	Name of Building Owner or Authorized Representative (First, Last or Single Name)	Position Title of Building Owner or Authorized Representative (if applicable)
Building Owner 3	Name (First, Last or Single)	Position Title
Signature	Sign/Digital signature	Date (yyyy-mm-dd)

Building Owner 4	Name (First, Last or Single)	Position Title		
Signature	Sign/Digital signature	Date (yyyy-mm-dd)		

Building Owner 5	Name (First, Last or Single)	Position Title
Signature	Sign/Digital signature	Date (yyyy-mm-dd)

Please submit completed forms and attachments by mail or email to:

Mail:

Attn: City of Toronto, Better Buildings Partnership Environment & Climate Division Metro Hall (C/O Union Station, 2nd Floor East Wing) 55 John Street, Toronto, ON M5V 3C6

Email: bbp@toronto.ca using your business email account

Attachment 1 - Feasibility Study or Detailed Engineering Design

Attachment 2 - Energy Assessment Report (Audit)

Attachment 3 - Deep Retrofit Project Details

 Table 1– Deep Retrofit Project Details Template

#	Description of Deep Retrofit eligible measure(s)	Project Stage for Eligible Measure(s) (i.e. design, construction, commissioning)	Contractor Name	Estimated Cost of Measure(s)	Estimated Lifetime of Improvement (years)	Was this recommended in the Energy Assessment Report (Attachment 2)?
	Indicate ONLY those measures that the Building Owner intends to complete as the Deep Retrofit Project for this Challenge and is listed as an 'eligible cost' for the Challenge found in Section 4.8 of the Applicant Guide and/or listed in the Energy Assessment report. Please itemize each improvement and describe the equipment type, efficiency rating, make/model, material, etc.	Indicate whether the measures are required during the design, construction or commissioning phase (e.g. a calibrated pre- retrofit energy model is required at the design stage, whereas window replacement takes place during construction)	Identify the name(s) of the Contractor(s) providing a cost estimate.	Indicate the estimated cost of each measure intended to be completed that has been provided via a quote from a qualified contractor.	Indicate the estimated lifetime of each of the measures.	Please state Yes or No.
1.						
2.						
3.						
4.						
5.						

Attachment 4 - Estimated Reductions

Attachment 5 - Detailed Deep Retrofit Project Budget

Attachment 6 - Project Management Plan

Attachment 7 - Utility Data (12 months)