Edmonton's Building Energy Benchmarking Program

Participation Guide

Year 9

CHANGE BUILDINGS FOR CLIMATE

Edmonton

BUILDING ENERGY BENCHMARKING PROGRAM

INTRODUCTION

The City of Edmonton has established a voluntary building energy benchmarking program that will lay the foundation for broader market transformation by providing building energy performance information to all interested stakeholders. Edmonton's Building Energy Benchmarking program aims to collect accurate, annual information on whole building energy performance across Edmonton's large building stock.

The information will be used to benchmark building energy performance across Edmonton's large buildings and direct energy efficiency improvements in buildings through the creation of an information-action feedback loop with program participants. The goal of the program is to collect information on large building energy performance and provide it to interested stakeholders, a common approach that has demonstrated improved energy efficiency and significant greenhouse gas emissions reductions in 20+ cities in North America. For more information on the benchmarking program please visit the website at **edmonton.ca/energybenchmarking**.

Participation is open to any interested commercial, multi-residential, light industrial, and special purpose buildings that meet the following eligibility criteria:

- *Building Type* – The building exists within Edmonton's city limits and falls within one of the City of Edmonton's property assessment categories
- *Building Size* – The building has a Gross Floor Area of greater than 1,000 ft^2.
- *Eligibility of Industrial Buildings* – The industrial buildings targeted for participation in the program are buildings that are classified under industrial business or light industrial zones by the City.

PROGRAM OVERVIEW

Edmonton's Building Energy Benchmarking program began as a 3 year pilot in June 2017. The program has been extended for Year 9. Annual feedback has and will continue to be collected and the program design will evolve through an evidence-based approach. The program encourages and supports building owners and managers to benchmark their energy performance over each calendar year.

This document serves as a **Participant Guide** that outlines the steps necessary to participate in Year 9 of the Program. It is intended as a step-by-step guide to simplify the participation process so that anyone can benefit from the program.

GETTING STARTED

Participation in Edmonton's Building Energy Benchmarking Program has been made as simple as possible, and is intended to take very little time and effort on behalf of the program participants. All you will need to get started is:

- Identify which building(s) will be participating and get approval from the building owner to participate.
- Collect 12 months of natural gas and electricity utility bills for all utility meters located within the building (**January 1, 2024 to Dec 31, 2024, and Jan 1, 2025 to Dec 31, 2025**). If necessary, step 4 lists options available to access utility information.
- Certain basic building information (square footage, space type, occupancy information, etc)

Each participant is welcome to submit as many eligible buildings as they like, but will need to submit each building's data individually. Also, it is recommended that all participants attend an Information Session or Workshop to learn more about the program and to get help with data collection and submission

City of Edmonton hosted benchmarking support services provide one-on-one support for your data collection and submission to ENERGY STAR Portfolio Manager. For more information on these services and see the final page of this document or edmonton.ca/energybenchmarking.

PARTICIPATION PROCESS OVERVIEW

Participation should follow these 8 steps described below. Please note, steps 1 through 5 must be completed. All forms and supporting documents can be found at edmonton.ca/energybenchmarking.

1. REGISTRATION & CONSENT

The first step to participation is registering each building that will be participating in the program, using the Participant Registration & Consent Form.

This form is used to collect some basic information about you and the building(s) you are submitting. You may register as many as 20 buildings in a single registration form, but you will be asked to provide basic information about each individual building. Applicants will be notified of their eligibility, or reasons why they are not eligible to participate, shortly after the registration and consent forms are submitted online. The City will provide eligible participants with an email outlining next steps to participation.

This form also includes details about program participation that require building owner consent, including data management, privacy and provisions of disclosure. **This consent must be submitted in order for registration to be complete**. If you have questions, please contact the City of Edmonton.

2. ENERGY STAR PORTFOLIO MANAGER

ENERGY STAR Portfolio Manager has been selected as the tool for energy benchmarking, reporting and disclosure for the Pilot. ENERGY STAR Portfolio Manager is a free, secure, web-based building energy benchmarking tool. The tool supports users in comparing building energy consumption and energy

performance metrics, as well as GHG emissions, for a single building or across a portfolio of buildings..

All participants need to have a Portfolio Manager account. Participants who do not currently use Portfolio Manager will need to create an account, while participants who already use Portfolio Manager can use their existing account. Creating an account is free and can be done on Portfolio Manager's website and requires basic information such as organization name and contact.

For detailed instructions on using this online tool, please refer to the **ENERGY STAR Portfolio Manager Toolkit** located at edmonton.ca/energybenchmarking.

3. DATA SUBMISSION

You will now need to prepare and submit a building data profile within Portfolio Manager for every building that you registered in Step 1. A building data profile consists of building characteristics and energy use information that are used for benchmarking and calculating energy and GHG performance metrics. There are several steps required for you to set up each building within Portfolio Manager:

1. Sign into ENERGY STAR Portfolio Manager account
2. Configure the Property Set Up
3. Add Building Characteristics and Building Use Details
4. Add Energy Utility Meters

All data submissions should be prepared according to the instructions in Portfolio Manager. Guidance documents, definitions, and technical reference documents are available on Natural Resources Canada's website and within Portfolio Manager. The City will also provide assistance in preparing the data submission for any interested participant either with passive support (an online Technical Toolkit) or active support (an energy benchmarking workshop, ENERGY STAR Portfolio Manager workshops). For more information contact us or please see edmonton.ca/energybenchmarking.

4. ENERGY CONSUMPTION DATA COLLECTION

Benchmarking building energy performance requires whole building utility data. Whole building data is defined as all energy consumed within the building as measured by all active energy utility meters located within the building. Whole building data is necessary for the accurate calculation of building energy benchmarking metrics in Portfolio Manager, including EUI (Energy Use Intensity) and GHGI (greenhouse gas intensity). Participants need to obtain building level utility data in order to complete the data submission required for the program. For Year 9 of the program, monthly utility data for the period of January 1, 2024 to December 31, 2024 must be collected and submitted to Portfolio Manager.

Where whole building data is not centrally aggregated for a single building, such as in many multi-residential buildings or commercial buildings where tenants have their own energy utility accounts, the information will need to be collected.

There are three tracks by which you can get whole building data, depending on your access to energy utility meter data.

Track 1: Participant has access to all energy meter and consumption data:

- You have access to the energy utility consumption for the whole building through your utility bills and/or existing arrangements with your utility provider and tenants.
- You enter the whole building's energy consumption into your Portfolio Manager account.

Track 2: Participant has tenants who are willing to share energy consumption data with the building owner or manager representative:

- Aggregate building data can be compiled from you and your tenants' utility bills and entered into Portfolio Manager as multiple meters.
- If you have consent from all tenants for 3rd party disclosure of their utility data, then you can request aggregated utility data directly from your electricity and gas utility companies. The 3rd party consent process is utility specific; as a result you will need to contact your utility retailer(s) for instructions. If you need assistance, please contact the City of Edmonton for help.

Track 3: Participating building has more than 4 tenants and the building owner/manager wants to collect aggregated consumption data:

- If you have more than 4 tenants within a specific building, then aggregated data can be provided to the building owner without individual tenant consent. This level of aggregation is considered large enough that consumption data can be shared while individual privacy is protected.
- Requests for aggregate building energy utility data will be coordinated by the City of Edmonton and obtained through a request to the applicable transmission & distribution utility company (EPCOR for electricity and ATCO Gas for natural gas). Participants interested in requesting whole building, aggregated electricity and natural gas data are asked to submit the following information to energystar@edmonton.ca:
    - Building owner (name & company)
    - Energy utility type (electricity or natural gas)
    - Building address & Postal Code
    - Number of suites or tenants
    - Building type and space use (list all)
- The City will follow up and will request any necessary information to request the data.

No matter which method you use to obtain the whole building utility information, once you have it you can enter it into the Portfolio Manager for each individual building. In order for this step to be finished, all building specific data (including building characteristics and utility consumption) should be entered for each participating building resulting in a complete building profile(s).

5. DATA SHARING

Once data entry is complete, you are now ready to share the information with the City of Edmonton. It is important that this sharing takes place before the data submission deadline of **February 27, 2026**. Sharing occurs online, entirely within the Energy Star Portfolio Manager platform. You will receive a data request email from the City of Edmonton, inviting you to share your building information.

You will be asked to click on a link that will automatically prepare a draft report of your data to be shared with the *City of Edmonton – Energy Transition Unit* ENERGY STAR Portfolio Manager account. You will have the option to review your data prior to sharing.

Once you submit your data, congratulations! You have now successfully completed the participation process. You may be contacted by the City of Edmonton with questions about your submission, as part of their data verification procedures.

6. DATA VERIFICATION & ANALYSIS

The City will access all shared building performance data through Portfolio Manager. Data analysis and verification will then be performed, followed by the preparation of benchmarking reports and determination of top performers. The data will be analyzed in two parts:

I. ***Summary Participation and Benchmarking Results*** – Aggregate results for all participating buildings be made public including:
   - Number of buildings
   - Total Gross Floor Area
   - Total Energy Usage
   - Total GHG Emissions

II. ***Benchmarking Metrics*** – Annual benchmarking results will be performed across all pilot program participants for the following metrics:
   - Site Energy Use Intensity (GJ/m^2)
   - Weather Normalized Site EUI (GJ/m^2) for buildings with multiple years of data reported
   - Source Energy Use Intensity (GJ/m^2)
   - Total GHG Emissions (tonnes)
   - Site GHG Emissions Intensity (tonnes CO_2e/m^2)

8. DISCLOSURE

Once data analysis is complete, building specific participant reports will provided that include:

1. ***Participant Benchmarking Results*** – The participant will receive a participant report including their building's EUI, ENERGY STAR Score (if available), and total GHG emissions. Results will be compared to all other local, provincial and national benchmarks.
2. ***Comparison to previous year's results*** – The participant report will include a comparison to the buildings previous results, if applicable.
3. ***Ranking and/or Recognition*** – If a building's performance is in the top quartile of a given building category (for EUI or ENERGY STAR), this should be explicitly recognized in the report.
4. ***Overview of City, Provincial, and Federal programs and incentives*** – the report will provide a short description of relevant and available incentives to improve building energy efficiency. The Benchmarking Report will be published annually on the City of Edmonton website and will contain:
5. ***Aggregated and anonymized data from all participating buildings*** - This data will be disclosed in all years of the program.
6. ***Building level data (from those who consent)*** – While aggregated and anonymized data will be made public, building level disclosure will be voluntary.

Category	Data Fields
Building Information	Building Name, Property Type & Use
	Year Built
	Gross Floor Area (m^2)
Energy Performance	ENERGY STAR Score (1-100) *(if applicable)*
	Site Energy Use Intensity (EUI) (GJ/m^2)
	Weather Normalized Site Electricity EUI (GJ/m^2)
	Weather Normalized Site Natural Gas EUI (GJ/m^2)
	Source Energy Use Intensity (EUI) (GJ/m^2)
GHG Performance	Total Site Energy Use (GJ/m^2)
	Total GHG Emissions (tonnes)
	Site GHG Emissions Intensity ($tonnes/m^2$)
	% Energy from Electricity
	% Energy from Natural Gas
	% Energy from Steam

Table 1: Public Disclosure Data Fields