

# Vancouver Annual Greenhouse Gas and Energy Limits By-Law (By-Law) FAQs

Category 1: Annual Energy and Carbon Reporting Requirements

# • What is Energy and Carbon reporting?

- Reporting energy and carbon data is a widely adopted practice for tracking the energy performance of a building over time. By measuring a building's energy use and comparing it to the average consumption of similar buildings, owners and occupants can better understand their building's relative energy performance and identify opportunities to cut energy waste. Learn more here.
- What are the benefits of Energy and Carbon reporting?
  - By measuring a building's energy use and comparing it to the consumption of
  - similar buildings, owners and occupants can better understand their building's relative energy performance and begin identifying opportunities to cut energy waste, reduce operating costs, and thus boost net operating income.
  - Building energy data trends can inform local policy as well as programs and incentives to help increase the adoption of energy-saving upgrades. This can also create local jobs for engineers, contractors, energy auditors, and construction workers as building owners look for ways to save energy and hire professionals to help.
  - The <u>DataTrends Research</u> study done by the United States EPA found that buildings that consistently have their energy use benchmarked save an average of 2.4% in annual energy savings per year and see a 6-point increase in their ENERGY STAR® Score.
- What is a covered building?
  - A building that is required to submit an Energy and Carbon Report summarizing its energy performance (i.e., "covered" by the Vancouver Annual GHG and Energy Limits By-Law").
- What type of buildings are required to report (i.e., covered buildings) their performance?
  - All buildings under the By-Law are subject to the annual Energy and Carbon Reporting requirements and the sub-group of office and retail buildings >= 9,290 m<sup>2</sup> (100,000 ft<sup>2</sup>) are also subject to the Greenhouse Gas Intensity (GHGI) and Heat Energy Limits.
    - Table 1 provides a comprehensive summary of the By-Law requirements by major occupancy type, gross floor area and effective date for reporting.



 Table 2 shows the equivalent ENERGY STAR<sup>®</sup> Portfolio Manager<sup>®</sup> property type for each of the Major Occupancy Types in Table 1.

# Table 1 Requirements by Building Size and Occupancy Type for CoveredBuildings

Gross Floor Area (m²)	Major Occupancy Type	Heat Energy & GHG Reporting	Annual Building Operational Greenhouse Gas Intensity Limits	Annual Building Operational Heat Energy Intensity Limits
≥ 4,645 and < 9,290	A1, A2, A3, A4 D E F1, F2, F3 and MUBs*	<i>First report due:</i> June 1, 2025 <i>Period covered:</i> Calendar year 2024	N/A	N/A
	B3 C and MUBs*	<i>First report due:</i> June 1, 2026 <i>Period covered:</i> Calendar year 2025	N/A	N/A
≥ 9,290	A1, A2, A3, A4 F1, F2, F3 and MUBs*	<i>First report due:</i> June 1, 2024 <i>Period covered:</i> Calendar year 2023	N/A	N/A
	D and MUBs*	First report due: June 1, 2024 Period covered: Calendar year 2023	<i>After January 1,</i> 2026: 25 kgCO <sub>2</sub> e/m <sup>2</sup> <i>After January 1,</i> 2040: 0 kgCO <sub>2</sub> e/m <sup>2</sup>	<i>After January 1,</i> 2040: 0.09 GJ/m <sup>2</sup> (connected to, or without a connection to, a district energy utility provider)
	E and MUBs*	<i>First report due:</i> June 1, 2024 <i>Period covered:</i> Calendar year 2023	After January 1, 2026: 14 kgCO <sub>2</sub> e/m <sup>2</sup> After January 1, 2040: 0 kgCO <sub>2</sub> e/m <sup>2</sup>	After January 1, 2040: 0.09 GJ/m <sup>2</sup> (connected to, or without a connection to, a district energy utility provider)
	B3 C and MUBs*	<i>First report due:</i> June 1, 2025 <i>Period covered:</i> Calendar year 2024	N/A	N/A

\*MUBs means Mixed-Use Buildings in which the sum of the floor area of the included occupancies is 50% or greater of the building gross floor area.

# Table 2 Major Occupancy Classification in Accordance with the Annual GHGLimits By-Law and ENERGY STAR Portfolio Manager

Group	Division	Description of	Major Use Type from Portfolio Manager
		Major Occupancy	



A	1	Assembly occupancies intended for production and viewing of performance arts	Entertainment/public assembly <ul> <li><u>Movie Theater</u></li> <li><u>Performing Arts</u></li> </ul>
A	2	Assembly occupancies not elsewhere classified in Group A	Entertainment/public assembly  Aquarium Bar/Nightclub Bowling Alley Casino Convention Center Fitness Center/Health Club/Gym Ice/Curling Rink Museum Roller Rink Social/Meeting Hall Swimming Pool Other - Entertainment/Public Assembly Other - Recreation Education
			<u>Adult Education</u> <u>College/University</u> <u>Pre-school/Daycare</u> <u>Vocational School</u> <u>Other - Education</u>
			Public services <ul> <li><u>Library</u></li> <li><u>Social/Meeting Hall</u></li> <li><u>Transportation Terminal/Station</u></li> </ul>
A	3	Assembly occupancies of the arena type	Entertainment/public assembly <ul> <li>Indoor Arena</li> <li>Stadium (Closed)</li> </ul>
A	4	Assembly occupancies in which occupants are gathered in the open air	Entertainment/public assembly <ul> <li><u>Aquarium (Open)</u></li> <li><u>Race Track</u></li> <li><u>Stadium (Open)</u></li> </ul>
В	3	Care occupancies	<ul> <li>Healthcare</li> <li><u>Ambulatory Surgical Center</u></li> <li><u>Outpatient Rehabilitation/Physical Therapy</u></li> <li><u>Residential Care Facility</u></li> </ul>
С	-	Residential occupancies	Lodging/Residential <ul> <li><u>Barracks</u></li> <li><u>Hotel</u></li> <li>Multifamily Housing</li> </ul>



			Residence Hall/Dormitory
			Senior Living Community
D	-	Business and personal services occupancies	Office      Medical Office     Office     Veterinary Office Banking/Financial services     Bank Branch     Financial Office
E	-	Mercantile occupancies	Retail         • Automobile Dealership         • Convenience Store without Gas Station         • Enclosed Mall         • Lifestyle Center         • Retail Store         • Strip Mall         • Wholesale Club/Supercenter         Personal Services         • Barber and hairdressing shops Beauty parlours
F	1	High-hazard industrial occupancies	Manufacturing/Industrial <ul> <li><u>Manufacturing/Industrial Plant</u></li> </ul>
F	2	Medium-hazard industrial occupancies	Manufacturing/Industrial <ul> <li><u>Manufacturing/Industrial Plant</u></li> </ul>
F	3	Low-hazard industrial occupancies	Manufacturing/Industrial <ul> <li><u>Manufacturing/Industrial Plant</u></li> <li><u>Warehouse/Storage</u></li> </ul>



- What are the buildings that need to comply with GHGI and Heat Energy Limits requirements?
  - GHGI and Heat Energy Limits apply to office and retail buildings 9,290 m<sup>2</sup> (100,000 ft<sup>2</sup>) and larger. Table 3 shows the ENERGY STAR<sup>®</sup> Portfolio Manager<sup>®</sup> property types that are covered by the GHGI and Heat Energy Limits.

# Table 3 Major Occupancy Classifications Covered by GHGI and Heat EnergyLimits

Group	Division	Description of Major Occupancy	Major Use Type from Portfolio Manager
D	-	Business and personal services occupancies.	Office (Office refers to buildings used to conduct commercial or business activities. This includes administrative and professional offices.)
			<ul> <li><u>Medical Office</u></li> <li><u>Office</u></li> <li><u>Veterinary Office</u></li> <li><u>Radio Station (benchmark as Office in Portfolio Manager)</u></li> <li>Banking/Financial services</li> <li><u>Bank Branch</u></li> <li><u>Financial Office</u></li> </ul>
E	-	Mercantile occupancies	Automobile Dealership         • Convenience Store without Gas Station         • Enclosed Mall         • Lifestyle Center         • Retail Store         • Strip Mall         • Wholesale Club/Supercenter

- Is my building covered by the Vancouver Annual GHG Limits By-Law?
  - Please check the Building Lookup tool.
- What does the Vancouver Annual GHG Limits By-Law require from covered building owners?
  - For every covered building subject to the By-Law, the owner shall annually submit to the City of Vancouver an energy and carbon report in an electronic format via the <u>City of Vancouver Building Performance Reporting System (BPRS)</u> <u>Owner's Dashboard</u>.
  - The information included in the annual energy and carbon report shall include, at a minimum, the shared benchmarking information for the previous calendar year.



- What data will I be required to submit to ENERGY STAR® Portfolio Manager®?
  - The owner of each covered building will need to enter data into Portfolio Manager so that the energy and carbon report shall be based on an assessment of the aggregated total energy consumed by the whole building for the entire calendar year being reported.
  - Before submitting an energy and carbon report, the City recommends the owner run all automated data quality checker functions available within Portfolio Manager and verify that all data has been accurately entered. In order for the energy and carbon report to be considered in compliance with the By-Law, the owner shall correct all missing or incorrect information as identified by Portfolio Manager prior to submitting the report.
  - If the current owner learns that any information reported as part of the energy and carbon report is inaccurate or incomplete, the owner shall amend the information and provide the City of Vancouver with an updated submission within 30 days of learning of the inaccuracy.
- When do I need to start reporting my energy and carbon data to the City of Vancouver?
  - The owner of a covered building shall ensure that for each such building, an energy and carbon report is generated, completed, and submitted annually.
  - The energy and carbon reports for each covered building shall be due by the dates as defined below. Gross Floor Area and Initial Compliance Required by:
    - Commercial buildings ≥ 9,290 m<sup>2</sup> (100,000 ft<sup>2</sup>) = June 1, 2024
    - Commercial buildings 4,645 9,290 m<sup>2</sup> (50,000 99,000 ft<sup>2</sup>) = June 1, 2025
    - Multifamily buildings 9,290 m<sup>2</sup> (100,000 ft<sup>2</sup>) or larger = June 1, 2025
    - Multifamily buildings 4,645 m<sup>2</sup> (50,000 ft<sup>2</sup>) or larger = June 1, 2026
- What happens if a building owner does not comply with the Energy and Carbon reporting requirements?
  - Failure to comply with the requirements of this By-Law by the annual deadline will result in a \$500 By-Law notice.

The reasons constituting failure to comply will include:

- Submission of incomplete and inaccurate Energy and Carbon Reporting data
- Late submission of Energy and Carbon Reporting data without an approved extension by the City
- Failure to complete submission requirements and pay for Carbon Emission Operating Permit (CEOP) by annual deadline for buildings under GHGI limits starting 2027.



- By-Law notices may be issued daily until the building owner complies with the regulation requirements. Paying the By-Law notice does not make a building owner compliant with the regulation requirements. They have to submit a complete energy and carbon report and buildings under GHGI limits additionally have to take out a CEOP in order to be compliant.
- A By-Law notice paid within 14 days is subject to 50% of the full amount of the fine and subsequent days will result in the full amount of the fine. After 60 days, a non-compliant notice will be sent to a collection agency, which may affect credit rating for building owners.

#### • What is a compliance agreement?

- A compliance agreement is an enforcement tool that may be used by the City in rare cases to enter into an agreement with a building owner who has failed to comply with the By-Law. The related penalty will be suspended if the person who breached the By-Law agrees to certain terms and conditions such as the steps to be taken and the timeline to be met that will result in compliance with the by-law. If the terms and conditions of the compliance agreement are met then no penalty is imposed. If the terms and conditions are not met, then the compliance agreement can be rescinded, and the person will be subjected to the penalty.
- Note: Compliance agreements are not simply an additional extension option. The City will enter into a compliance agreement only if the reasons sought by the building owner for the agreement are justified.

#### • Does my building qualify for an exemption?

- Only buildings that ceased occupancy and commenced demolition under an issued demolition permit during the compliance year (i.e., the calendar year for which energy use and carbon emissions data is being reported) are exempted from the Vancouver Energy and Carbon Reporting and GHGI Limit requirements. Buildings that qualify for an exemption will need to submit the following documentation:
  - Copy of Issued Demolition Permit
  - Attestation that the building ceased occupancy during the calendar year for reporting

#### • Can I get a deadline extension for the energy and carbon reporting requirements?

- The Vancouver Annual Greenhouse Gas and Energy Limits By-Law allows a two-month extension for reporting energy use and carbon emissions. A building applying for an extension will need to submit an application containing the following information by May 15 of the year in which the report is due.
  - Statement attesting that energy use data was not available from the utility by May 1 of the reporting year
  - Documentation demonstrating that reasonable attempts to acquire the data were made before May 1



- Signed by owner or owner's representative
- The extension form is available in the <u>Building Performance Reporting System</u> <u>Owner Dashboard</u>.
- Am I required to hire a third-party consultant or service provider to comply with the energy and carbon reporting requirement?
  - No, a building owner is not required to hire a third-party service provider to comply with the By-Law. Building owners can independently obtain their energy data from their local utility or district energy provider, enter it into ENERGY STAR Portfolio Manager, and submit it to City of Vancouver. However, building owners can hire a third-party benchmarking service provider if they need assistance.
- Is data verification of energy and carbon reports required?
  - Data verification requirements only apply to buildings subject to the By-Law's greenhouse gas intensity limits and heat energy limits. If your building is subject to these requirements, you must have your energy and carbon reporting data periodically verified by a qualified third-party. Third-party verification will be required in reporting year 2027 and every four years thereafter. A building owner will also be required to complete data verification in any year after 2027 where the building's energy and carbon report shows a change of at least 15% in the building's weather normalized greenhouse gas intensity or a change in the reported floor area of the building.

#### How do I get my energy and carbon report verified?

- Verification of reported data by a qualified third-party ensures accurate compliance by enhancing the quality of data reported. Data verification must be completed by a Registered Professional Engineer with EGBC or an Architect, AIBC. Building owners must use a third-party professional who holds an active credential as specified above. A third-party verifier cannot be the same person who completes reporting on your behalf.
- Follow the steps below to successfully have your data verified by a third-party:
  - Hire A Qualified Energy Professional for Third-Party Verification
  - Share Your Data with Your Third-Party Verifier through ENERGY STAR Portfolio Manager®
  - Submit Your Annual GHG By-Law Submission Form to Your Third-Party Verifier
  - Assist With Verification
- Confirm Verification is Complete with All Verification Records
- See our Greenhouse Gas Intensity Limits How-To-Guide for instructions on how to get your energy and carbon report verified.



#### • How do I submit the energy and carbon report if verification is not required?

- If you are not required to verify your building's energy and carbon reporting data, you will be prompted to submit your data to the City of Vancouver.
  - 1. After completing the GHG By-Law Submission Form, navigate to "Submit Your Data".
  - 2. Confirm that you have reviewed your Portfolio Manager data for accuracy and check the box to agree to have the City of Vancouver disclose your reported data.
  - 3. Click Submit your data to the City of Vancouver.
- Please Note: Once you submit your report, you will receive a notification from the City of Vancouver on your compliance status. In some cases, you will need to follow up with report errors and supplemental documentation.

# • What if I make an error and need to resubmit my building information?

 Each time a building owner submits an energy and carbon report to the City of Vancouver, the report will run through both an automated and manual review to check for accuracy and discrepancies to ensure data quality.

If errors or data quality flags are found in the report, the submitter will be notified via email from the Help Centre. The email will include an outline of any errors found, with step-by-step instructions on how to correct them. Once those corrections are made, the building owner will need to generate an updated response and resubmit the report. If an updated response is not generated prior to resubmitting, any corrections made will not be reflected in the resubmission. Please reach out to the Help Centre for further assistance on correcting errors and resubmitting the report.

#### • How do I know if my building is in compliance?

• Once a building owner has submitted their energy and carbon report in BPRS, the building owner will receive an email from the Help Centre indicating whether there are any issues with their data and if their building is in or out of compliance.

#### • Is my energy and carbon reporting information going to be shared publicly?

- Owners have the option to choose if they would like to publicly disclose their data. For owners that would like to opt in, the City of Vancouver will publicly disclose data reported through the Annual GHG By-Law on the City's online data disclosure map. For those that opt-in to data disclosure, some of the energy and carbon reporting information such as descriptive details about the physical building and its operational characteristics will be shared with the public.
- For owners that choose not to publicly disclose data, their report will be saved in the City's Building Performance Reporting System but not publicly disclosed.
- Please contact the Help Centre if you find incorrect information displayed on the public map or have additional questions about public disclosure.



- Can I receive support to help me comply?
  - Yes, please view the City of Vancouver's training materials or contact our Help Centre at [[energycarbonreport@vancouver.ca]] or [[604-330-3797]].
- Where can I read The Annual Greenhouse Gas (GHG) and Energy Limits By-Law?
  - The full <u>By-Law</u> is available to read online.

Category 2: Information for Building Owners

- Where do I find my Vancouver Building ID?
  - To find your building ID, search for your building address using the <u>building ID</u> <u>lookup tool</u>. Please Note: The address used by the City of Vancouver may not be the address that you are accustomed to using for your building. If you still cannot find your building ID, try these options below:
    - Parcel Address. You can find your parcel address using the City of Vancouver Tax Assessor or City's <u>VanMap</u> under the property information section.
    - Alternative Building Addresses. Search any and all variations of the building address if your building has several addresses using City's <u>VanMap</u> under the property information section.
  - If you still cannot locate your building ID, or if you think there is an error with your building ID or address, please reach out to the Help Centre.

# • How do I submit my energy and carbon report to the City?

- If a building owner already has an ENERGY STAR<sup>®</sup> Portfolio Manager<sup>®</sup> account, they should simply share their building's read only access with the City of Vancouver's Portfolio Manager account. If the owner does not already have a Portfolio Manager account, they can create one by completing the new account registration steps in Portfolio Manager and then share the building's read only access with City of Vancouver's account.
- How do I complete the GHG By-Law Submission Form?
  - Owners will need to complete a GHG By-Law Submission Form in the <u>Building</u> <u>Performance Reporting System</u> (BPRS) for each of their buildings. This form collects required and optional information that cannot be reported to ENERGY STAR® Portfolio Manager®.
    - Step 1. Create An Account
    - Step 2. Claim Your Properties
    - Step 3. Complete a Report for Each Building



- How do I report data through ENERGY STAR® Portfolio Manager®?
  - Please see our video series on how to report energy and carbon data with ENERGY STAR Portfolio Manager. Our How-To guides also contain step by step instructions on how to use Portfolio Manager.
- How do I obtain whole-building energy data?
  - Building owners should reach out to their utility and/or district energy providers directly to request their monthly whole-building energy use data.
  - Whole-building utility data for the building's energy use shall be compiled using one or more of the following methods:
    - 1. Obtaining aggregated, whole-building data from a utility provider;
    - 2. Collecting data from all tenants for nonresidential properties; or
    - 3. Reading a master meter.
- What if I cannot obtain whole-building energy data from the utility?
  - If the owner of a covered building cannot acquire whole-building energy data from a utility by May 1 of the year in which its energy and carbon report is due, then it should file for an extension using the BPRS extension form by May 15.
- I believe the City of Vancouver has my building's gross floor area (GFA) or gross leasable area (GLA) is listed incorrectly. How do I address this?
  - If you believe your building's GFA or LFA is recorded inaccurately, please contact the Help Centre to provide correct information and supporting documentation.
- My utility does not provide whole-building energy data as my building is below the threshold of minimum accounts required for aggregation. How should I get my whole building data?
  - When a utility does not provide whole-building energy or data, the owner of a covered building shall request energy data from tenants or occupants. The owner should keep a record of the tenant communication and submit it to the City in case the tenant does not provide the data to the owner.
  - When the owner of a covered building receives notice that a nonresidential tenant intends to vacate a space within such building and the utilities do not provide aggregated, whole-building data, the owner shall request information relating to such tenant's energy use for any period of occupancy relevant to the owner's obligation to benchmark.
- What if my building has more than one type of use? How many building use details should I add?
  - ENERGY STAR Portfolio Manager has specific rules for when you should break out separate building uses. The City of Vancouver encourages buildings to



include all of the occupancy use types in their buildings to the greatest extent practical.

- If your building is subject to the Greenhouse Gas Intensity (GHGI) Limits or Heat Energy Limits and contains a mixture of Office, Retail, or Residential occupancy types, you should be sure to enter these in your Portfolio Manager report, as these uses can have significant implications for your building's emissions limits and how your building's greenhouse gas intensity is calculated.
- For buildings that are eligible for an ENERGY STAR Score, and who are not subject to the GHGI or heat energy limits or who are subject to the limits but do not contain a mixture of office, retail, and/or residential use types, you should add an additional use type only if the use type meets any one of the following criteria:
  - If the use type can get an ENERGY STAR Score.
  - Retail can only get a Score if it is a "Single Store" of more than 5,000 sq ft. (you can't add together smaller stores), Multifamily Housing can only get a Score if there are at least 20 units, etc.
    - <u>Here is a list of requirements to get an ENERGY STAR Score for</u> <u>different property types.</u>
  - If it accounts for more than 25% of the property's gross floor area.
  - If it is a vacant/unoccupied Office or Medical Office (and the vacancy is greater than 10% of the property's gross floor area).
  - If the Weekly Hours differ by more than 10% for the same use type AND that use type can get a Score (ex: you have two Office tenants, and their hours differ by more than 10%).

# • What is my primary Property Type if my building has multiple uses?

- If your building has multiple uses, the primary Property Type is based on the Property Type that accounts for more than 50% of your property's gross floor area. This is selected when you set up your property and can always be changed by editing your property details in Portfolio Manager.
- Once logged in to Portfolio Manager, select your property in the dashboard. Then, open the "Details" sub-tab and scroll down on the right-hand side, where you will see a box that says "Property Type". Click edit under Property Type-Self-Selected. The Property Type you select should match the Property Type that is calculated by Portfolio Manager.
- If there is not one single Property Use Type that represents 50% or more of the property's GFA your Property Type will be classified as "Mixed Use".
- A list of Property Types and definitions is available at: <u>Canada. Property Types</u>, <u>Definitions</u>, and <u>Use Details</u>.

# • Are there any energy uses that are not part of my building's energy use?

 Parking lots, electric vehicles (EV) charging stations, cell phone towers, radio masts, and any external billboards used for leased advertising space are not part of your building's energy use and may be excluded if sub-metered.



 If an EV charging station, cell phone tower, radio mast, or external billboard is not sub-metered, please include that information in the "Property Notes" section so that the City of Vancouver has an accurate idea of what is included in the energy usage when your report is reviewed.

# • Can I enter energy bills that are not monthly?

 To create an accurate energy and carbon report using ENERGY STAR® Portfolio Manager®, monthly energy usage is required. For each annual energy and carbon report, the owner of a covered building must include a full 12-months (January 1st – December 31st) of entries for all energy sources at the property for the previous year. For some delivered energy sources, such as propane delivery, Portfolio Manager allows for entries that are greater than one month in duration. If a building owner does not receive monthly energy usage, please reach out to the Help Centre for further assistance entering your data accurately.

#### • Can I track common areas' energy usage separately from tenants' usage?

- If a building owner has access to all common area and tenant usage bills, they
  can enter the data in separate virtual meters within Portfolio Manager. However,
  the energy and carbon report will not evaluate separate metrics for the common
  area data versus tenant data. Portfolio Manager metrics will only evaluate how
  the building as a whole is using energy.
- How should I enter district energy consumption (i.e., district steam or district hot water)?
  - Currently, district energy utilities in Vancouver do not provide auto-upload of data to Portfolio Manager. Please ask your district energy provider to give you an annual summary of your energy consumption. You may ask your utility to provide the summary in an excel format that you can upload directly to your Portfolio Manager profile. You may need to enter this data into Portfolio Manager manually in case a summary in spreadsheet format is not provided. To enter this into Portfolio Manager please log into your account and click on your building in the dashboard. Then click on the Energy tab and on the right-hand side there will be a blue box that says "Add a Meter", click on this box. If there currently are meters in your energy section, then the blue box that says "Add a Meter" will be located under the graph. Check the energy sources that are applicable to your property and click "Get Started."
- How should I enter renewable energy information into ENERGY STAR® Portfolio Manager®?
  - Building owners can enter electricity data from onsite solar and wind into Portfolio Manager when setting up meters. Obtain data from your installer on the energy used, any energy exported out to the grid, and information about any renewable energy certificates generated. The use of onsite renewable electricity is part of



your overall site energy consumption (i.e., the energy requirement of your property) and must be reported and included in your total energy consumption. If you report your renewable energy generation and use accurately, it will be reflected in your building's greenhouse gas emissions metrics as calculated by Portfolio Manager.

- If you have Renewable Energy Credits (RECs), this is reflected in your ENERGY STAR® Score and Source EUI by assigning onsite electricity a source conversion factor that is used for grid-sourced electricity. For additional details on green power, see the <u>Green Power PDF created by the EPA</u>.
- If your building is subject to the greenhouse gas intensity and heat energy limits and uses renewable natural gas or low-carbon district energy, you may report it through the BPRS Owner's Dashboard to qualify for an adjustment to your building's greenhouse gas intensity and heat energy intensity. See the Greenhouse Gas Intensity Limits How-To Guide for instructions.

#### • Why is Portfolio Manager saying that I do not have whole-building energy data?

- If you receive an error stating you do not have whole-building energy data, it is likely due to selections made in Portfolio Manager – especially if you've confirmed that whole-building energy data is actually entered.
- In the "Energy" tab within Portfolio Manager, on the left-hand side find a box that says "You Are Tracking." There, check whether "Total energy consumption for your property" or "Partial energy consumption for your property" is selected. If the latter is selected, click "Edit". On the next page, you can update the meter selections. Make sure the option stating, "These meter(s) account for the total energy consumption for \_\_\_\_\_" is selected. This way, Portfolio Manager will recognize that you have whole-building energy data uploaded.
- Please reach out to the Help Centre if you continue to have trouble ensuring your data is recognized as whole-building usage.

#### • What if my building isn't fully occupied?

- ENERGY STAR Portfolio Manager defines "Occupancy" as the percentage of your property's gross floor area (GFA) that is occupied and operational. This is a measure of the building's occupancy/use, it is not connected to a building's "Maximum Occupancy." Below are some examples for thinking about how occupancy applies to your building in terms of Portfolio Manager:
- Office: Occupancy is a measure of the tenant spaces that are leased. If you have a 10-storey building, and on average one floor is vacant, and the other 9 floors fully leased and occupied, then the occupancy would be 90%. If you have people working on all floors/areas of your building, then you are 100% occupied. You do not need to count empty cubicles or the number of employees who enter a property.



- Hotel: Occupancy is a measure of the rooms that are sold. If you have a hotel with 100 rooms, and on average 10 rooms per night are vacant, then the occupancy is 90%.
- Multifamily: Occupancy is a measure of the units that are leased. If you have 100 apartments, and 5 are vacant for the year, then the occupancy is 95%.
- Worship Facility: Occupancy is the percentage of the building that is operational, regardless of how many people are in the building. Most of the time, this will be 100%.

#### • What if my whole building is rented by a single tenant?

 If your building has a single tenant who has assumed management of the entire building, you and your tenant can agree to delegate reporting duties to the tenant. This delegation must be noted in the "Property Notes" section of ENERGY STAR Portfolio Manager. However, the responsibility lies with the owner to ensure that their building's energy and carbon report is complete and submitted to the City by the June 1<sup>st</sup> deadline.

#### • What if there is split ownership of the building?

 All owners listed in the Tax Assessor records are responsible for compliance with all aspects of the By-Law. If you do not know who this is please reach out to the Help Centre and they can help determine where the responsibility lies.

#### • What if my property has multiple addresses?

- In ENERGY STAR Portfolio Manager, you can input the primary address as your property address or you can list a range of addresses. For example, if your property addresses are 400 Main St, 410 Main St, 420 Main St, and 430 Main St in Portfolio Manager you can input 400-430 Main St. If you are setting up auto-upload or receiving data via a spreadsheet from a utility, be sure to send an email with a list of addresses associated with your property and your Portfolio Manager Property ID\* number to your designated provider as well as the Help Centre.
- \*The Portfolio Manager Property ID is different from your Vancouver Building ID.
   The Portfolio Manager Property ID is a unique ID created by Portfolio Manager to track your property in their system. It can be found right under your property address in Portfolio Manager.

#### • Where do I enter my Vancouver Building ID?

- ENERGY STAR Portfolio Manager. Please follow the steps below:
  - Log in to Portfolio Manager and, from your Dashboard, click on a Property to add its Building ID.
  - Navigate to the 'Details' tab.
  - Scroll down to the 'Unique Identifiers (IDs)' box on the left, click 'Edit'.



- Select 'Vancouver Building ID' from the 'Standard ID City/Town' dropdown menu. Enter your Vancouver ID in the ID field. When adding your ID, ensure there are NO spaces, NO extra characters, and capitalize the letter 'V.'
- Click 'Save'.
- What if ownership of a covered building changes mid-year? Who is obligated to benchmark the property?
  - Buildings that have transferred ownership are not exempt from reporting requirements. When a covered property changes ownership, the previous owner shall provide the new owner with all information needed to benchmark for the period during which the previous owner was in possession of the property.
- How do I determine the gross floor area (GFA) for a building or for a Property Use within the building?
  - Many building owners will have information on gross floor area (GFA) from leasing, sale, or building plans that can provide dimensions for the building and/or individual property uses. City tax assessor records may also have records of square footage, however, those records are often organized by parcel or building section, while the By-Law requires compliance at the building level.
  - The calculation of GFA is a one-time step, necessary only in the first year of reporting. Any estimation of the floor area must be noted in ENERGY STAR® Portfolio Manager®, under "Property Notes." If the building's square footage changes due to a physical change in the building, such as a remodel, in Portfolio Manager go to the "Details" sub-tab for the property, and under "Property Uses and Use Details", select from the "Action" dropdown "Correct Mistakes." Then adjust the square footage and save corrections.

#### • What is included in my building's gross floor area (GFA)?

- The GFA is the total floor area of a building measured between the exterior walls.
   For the purposes of energy and carbon reporting, GFA can be reported in square feet or square meters. The GFA is not the same as leasable/rentable space.
   Below is a table showing spaces to include with the building GFA and those to exclude:
- Include in GFA:
  - Atriums (count the base level only)
  - Basements
  - Break Rooms
  - Clubhouses
  - Common Areas
  - Elevator Shafts
  - Laundry Rooms
  - Lobbies



- Mechanical Equipment Areas
- Meeting Rooms
- Restrooms
- Stairwells
- Storage Rooms
- Tenant Areas
- Do not include in GFA:
  - Attics
  - Balconies
  - Covered Walkways
  - Crawl Spaces
  - Decks
  - Driveways
  - Exterior Loading Docks
  - Exterior spaces
  - Outdoor Courts (Tennis, Basketball, etc.)
  - Outdoor pool decks
  - Parking
  - Patios
  - The interstitial plenum space between floors (which house pipes and ventilation)
- Can I report my building's leasable floor area instead of gross floor area?
  - Yes, the City of Vancouver will allow building owners to report their <u>Gross</u>
     <u>Leasable Area (GLA)</u> as defined by BC Assessment Authority. If reporting GLA, use the Gross Floor Area (GFA) field in Portfolio Manager and make a note in the Property Notes field that you are reporting GLA instead of GFA.
- What if I make an error and need to resubmit my building information?
  - If your building is already in compliance and you realize you made an error in your submission and need to resubmit information, please call the Help Centre first. We must prepare our system to receive your new data, otherwise it will not register.

Category 3: ENERGY STAR Portfolio Manager

- What is ENERGY STAR® Portfolio Manager® and why do I have to use it to create my property's energy and carbon report?
  - ENERGY STAR Portfolio Manager is a free online resource management tool that normalizes energy data for building size and use. Performance data is available to the public and provides users with a baseline of how their property is performing in comparison to other buildings of similar size and type. With this,



property managers and owners can make well-informed decisions in regards to increasing efficiency and decreasing energy costs. As the industry standard for measuring building performance, Portfolio Manager provides a standardized format for submitting energy data, making it clear for both building owners and the City of Vancouver to review.

# • What is an ENERGY STAR® Score?

- The ENERGY STAR® Score is based on a scale of 1-100 (where a score of 100 is the best performing), comparing your building's energy performance with that of similar buildings in Canada. The score normalizes for climate, weather, building size, and number of employees, among other factors. A score of 50 represents median energy performance, while a score of 75 or above qualifies a building for ENERGY STAR® Certification.
- What is Site EUI vs. Source EUI vs. Weather Normalized Source EUI? How are they calculated?
  - Energy use intensity (EUI) is the building's energy use per square foot. Source energy accounts for all the energy used in delivering energy to a building, including power generation, power transmission and distribution losses. Site energy is the amount of energy consumed by a building as reflected in utility bills.
  - ENERGY STAR Portfolio Manager typically shows a building's Source EUI, which is a complete assessment of the fuel required for operating the building. When you see Weather Normalized Source EUI, this is an estimate of what the Source EUI would have been in a year with "normal" weather conditions. For example, in a very hot year, Portfolio Manager might estimate your Weather Normalized Source EUI to be lower than your actual Source EUI. This allows an owner to more accurately compare a building's efficiency from year to year.
- Can I use my existing ENERGY STAR Portfolio Manager account or building profile?
  - If you already have an ENERGY STAR Portfolio Manager account, you may use it for energy and carbon reporting. However, make sure to add the building's Vancouver Building ID. Find your Building ID using the <u>Building ID Lookup Tool</u>.

#### • Does ENERGY STAR Portfolio Manager require we add parking?

 Portfolio Manager requires parking use details to be entered if the property's energy consumption includes parking areas. To account for whole building energy usage, if a building is metered with a parking garage, the 'Parking' use type and floor area will need to be accounted for in the initial property setup or separated out and added as an additional property use type . If the building has an independent or sub metered parking garage, the parking garage doesn't need to be included.



# • What if my property does not receive an ENERGY STAR Score?

- That's okay, it's not required! Only some building types will receive an ENERGY STAR Score, thus, some buildings will submit their energy and carbon reports to the City without an ENERGY STAR Score. The EPA publishes a list of <u>Property</u> <u>Types Eligible to Receive a 1-100 ENERGY STAR Score</u>.
- If your building type is on the list and you still didn't receive a score, there may be an error in your data or submission. To determine why your building didn't receive an ENERGY STAR Score when it is eligible for one, log into your Portfolio Manager account and select your building from the dashboard. In the right-hand corner, you will see a box with the Current EUI and Baseline EUI, above that, you will see hyperlinked text that says "Why not score?". If you click on that, it will explain why the building is not receiving an ENERGY STAR Score and how to correct it.

# • What is the ENERGY STAR Portfolio Manager Data Quality Checker?

 Per the ENERGY STAR Portfolio Manager, "The Data Quality Checker runs a set of basic data checks on your properties to help you identify possible data entry errors and to see whether your building differs from typical operational patterns. It will show you both warnings (marked by a yellow triangle icon) and errors (marked with a red stop sign icon)." Learn more here.

#### • How do you transfer ownership of an ENERGY STAR Portfolio Manager Property?

- Here are step-by-step instructions on how to connect with the individual who previously submitted and get the existing property transferred from their account to yours:
  - After you have created your ENERGY STAR Portfolio Manager account, you will need to add the previous submitter as a contact in Portfolio Manager.
    - Log into your Portfolio Manager account. In the upper right-hand corner, you will see a "Contacts" button. Click on "Contacts."
    - This will bring you to the "My Contacts" page where you can view existing contacts and add new ones. Click the "Add Contact" button.
    - Within the "Find a Contact in Portfolio Manager" section, search for the previous submitter within the "Name" section by searching their full name or the "Email" section by searching the email they used for their Portfolio Manager Account. Click "Search."
    - You will see their contact appear on the right, select "Connect."
  - 2. After sending a Connection Request to them, let them know you have sent a request and ask them to accept the connection. After they accept the connection, they can transfer the property to you. They will want to follow the instructions found in "<u>How do I transfer properties to another</u> <u>user?</u>" With steps for transferring a property.



- 3. Once they transfer the property to you, you will need to log into your Portfolio Manager account and accept the property. To do so, go to the "Notifications" button in the upper right-hand corner. There you will find an Incoming Request from the previous submitter requesting to transfer the property to you. Click "Accept."
- Where do I transfer a building in ENERGY STAR Portfolio Manager if I don't have contact with the new management?
  - If you can obtain the new owner or property manager's contact information, we recommend reaching out to them and directly transferring the property to their ENERGY STAR Portfolio Manager account. If you have attempted to contact the new owner and have been unsuccessful in doing so you can transfer the property to a holding account. Please do not delete a property that will need to submit an energy and carbon report in the future because all of the historical data will also be deleted.
  - To transfer a property to a holding account, you will need to send an email to <u>buildings-batiments@nrcan-rncan.gc.ca</u> and provide them with your property's Portfolio Manager ID number (this number is located under each property's name in your Dashboard), and let them know you would like to transfer this property to a holding account because the property has been sold and you do not know who the new owner or property manager is. Then, also send an email to the Help Centre letting them know the building has been sold and the property's Portfolio Manager profile is in a holding account.
- How do I obtain my username and password for ENERGY STAR Portfolio Manager if I forgot it?
  - The only way to retrieve a username and/or password for an ENERGY STAR Portfolio Manager account is to have access to the email that is linked with the account. If you have access to that email then you can reset the password and obtain the original username (the username cannot be changed). If you do not have access to that email then you will need to create a new account. If you are unsure as to what email is associated with your Portfolio Manager account, please reach out to Natural Resources Canada's ENERGY STAR Portfolio Manager Customer Support at info.services@nrcan-rncan.gc.ca.
- How do I correctly enter the number of units in a low, medium or high rise setting for multi-family properties?
  - For multi-family properties, you must enter the number of units in low (1-4 floors), medium (5-9 floors), or high (10 floors) rise settings. Most multi-family properties only have ONE setting. For example, if a building has 11 floors, then all units in that building are in a high-rise setting. If a building has eight floors, all units in that building are in a medium rise setting. The only time a building should have units in more than one setting is if there are two parts of the same building that



are very different heights – for example one section is a high -rise tower and the other section only has three floors.

#### • How should I benchmark multiple buildings that share a meter?

- Owners of multiple buildings that share one energy meter for one or more of their energy sources must comply with Vancouver Annual GHG Limits By-Law by combining those buildings' data together as a single building in a single energy and carbon report.
- Where multiple buildings share both electric and gas meters, we encourage owners to look into sub-metering. In addition to helping an owner better understand energy usage, sub-metering may enable the building to be eligible for ENERGY STAR<sup>®</sup> certification if the building has an ENERGY STAR Score of 75 or higher. Only hotels, hospitals, K-12 schools, multi-family housing, and senior care communities are eligible for certification as a campus today. Find more details on options for energy and carbon reporting multiple buildings as a campus in "How to Benchmark a Campus in Portfolio Manager".

#### • How do I create a campus in ENERGY STAR Portfolio Manager?

- If your property consists of multiple buildings, you can treat them as a campus for energy and carbon reporting. The advantage of reporting a property as a campus is that you can measure the performance of each individual building, while also tracking how each building contributes to the campus-wide performance. To set up a campus please follow the steps outlined in this document "<u>How to</u> <u>Benchmark a Campus in Portfolio Manager</u>". Setting up a campus is a bit trickier than energy and carbon reporting for individual buildings. Should you need additional assistance, please reach out to the Help Centre.
- Do I have to create individual energy and carbon reports for each building in my apartment complex or can I submit a single report for the entire property?
  - If your property consists of multiple buildings that share an energy meter, you
    must report them together in a single energy and carbon report under one
    Vancouver Building ID. You will also need to aggregate the gross floor area,
    property details, and energy consumption for every building into one building. If
    more than one of the buildings in your complex has a Vancouver Building ID,
    please contact the Help Centre to consolidate your complex's buildings under a
    single ID.
  - If your property consists of multiple buildings that do not share energy meters, you can choose to report them together as a campus or as individual buildings with their own energy and carbon reports. If you want to set up your property as a campus, please refer to "How do I create a campus in ENERGY STAR Portfolio Manager?" above.



- When creating energy meters in ENERGY STAR Portfolio Manager, what is the proper unit of measurement for each service type? How do I know the date the meter became active?
  - When creating energy meters in ENERGY STAR Portfolio Manager you will need to know three things:
    - 1. The sources of your property's energy (electric, natural gas, renewable energy, district energy, transport fuel, solar, wind, etc.);
    - 2. The unit of measurement that you are billed in for each service type; and
    - 3. The meter activation date (does NOT need to be the actual date the meter was activated). The meter activation date should be prior to or match the start date of the first entry in your service meter in Portfolio Manager.
  - For example, if you are reporting your property's 2023 usage and your first entry is 01/01/2023 then your meter activation date should be 01/01/2023 or a date before that. Utilities in BC may upload data going back to 3 years, so it is better to put a date going back 3-4 years.
  - The unit of measurement will be on your utility bill, but if you have any questions, you can reach out to the Help Centre for assistance.

#### • How should parking be benchmarked?

- For Connected Parking Garages:
  - Building owners should include energy used in the garage (lighting for example) in their energy and carbon report, but the square footage of the garage should not be counted in the building's gross floor area. Portfolio Manager has a separate field to enter parking square footage.
- How to Treat Parking Floor Area:
  - If the property includes parking areas (enclosed or open) with energy consumption, you do NOT need to include the parking areas in the total gross floor area. If your property has parking, the square footage of the parking area will be added separately from the gross floor area of the rest of the building. Click the box for "My property's energy consumption includes parking areas." Also, for the purposes of benchmarking, "parking" refers to buildings and lots used for parking vehicles. This includes open parking lots, partially enclosed parking structures, and completely enclosed (or underground) parking structures. Parking structures may be free standing or physically connected to the property. For more details, see the entry for "Parking" in the ENERGY STAR Portfolio Manager Glossary:

https://portfoliomanager.energystar.gov/pm/glossary

- Parking Energy is Part of a Building's Energy Use:
  - Monthly, whole-building energy use data is required for all fuel types for the 12 months of the previous calendar year. Whole-building energy use



includes energy used for heating, cooling, operating equipment, lighting, cooking, and all processes and operations carried out in the building, including by tenants. Energy used for parking areas should also be included.

- Standalone Parking Garages (not owned by a building but essentially businesses in their own right):
  - If you are reporting a standalone parking garage, EPA and Natural Resource Canada recommend that you select the "Other" building type when creating the building. Do not check off "My building's energy use includes parking areas." Instead, just enter the total area of the garage (i.e., including parking) as the area of the building. This will prevent any error messages from coming up as you continue.

#### • Where can I learn more about ENERGY STAR Portfolio Manager?

 More information is available online at <u>www.energystar.gov/benchmark</u> or by visiting <u>Portfolio Manager's FAQs page</u>.

Category 4 – Greenhouse Gas Intensity (GHGI) and Heat Energy Limits

- What are the GHGI Limits and Heat Energy Limits?
  - The GHGI and Heat Energy Limits were established to encourage building owners to choose retrofit solutions for their buildings that are cost effective (highest efficiency), limit peak electricity demand (by allowing for the use of renewable natural gas for peak heating demand and back-up) and conserve limited renewable energy resources.

The Limits focus on regulating energy and emissions from heat energy, particularly for heating spaces and water. These limits will be based on the amount of natural gas and district energy used per unit of floor area multiplied by the carbon pollution impacts of those energy sources. The limits do not take into account a building's use of electricity.

- Who do the Limits Apply to?
  - All buildings under the Annual GHG By-Law are subject to the annual energy and carbon reporting requirements, but only the sub-group of office and retail buildings
     > 9,290 m<sup>2</sup> are also subject to the GHGI and Heat Energy Limits.
- What are the GHGI Limits in 2026?
  - Starting in 2026, office and retail buildings equal to or larger than 9,290 m<sup>2</sup> (100,000 ft<sup>2</sup>) in Vancouver will be required to keep annual GHG emissions below a GHG intensity (GHGI) limit:



- Offices = 25 kg CO2e/m²/year
- Retail = 14 kg CO2e/m²/year
- All buildings subject to the 2026 limits will be required to start submitting energy and carbon reports in 2024. In 2027, owners of these buildings will have to get their energy and carbon reports verified by a 3<sup>rd</sup> party professional for the 2026 data submission and then every 4 years after.

# • What are the GHGI Limits and Heat Energy Limits in 2040?

- In 2040, the GHGI limit will be zero emissions. These limits will be based on the amount of natural gas and district energy used per unit of floor area multiplied by the carbon pollution impacts of those energy sources. Beginning in 2040, the largest office and retail buildings will also be subject to a Heat Energy Limit of 0.09 gigajoules of energy equivalent per square meter of gross floor area per year (GJ/m<sup>2</sup>/year)
  - GHGI = 0 Kg CO2e/m<sup>2</sup>/year
  - HEL = 0.09 GJ/m<sup>2</sup>/year

# • What if my building is mixed use?

 The Vancouver GHGI and Heat Energy Limits were established recognizing that even though a building might be majority office or majority retail, that building may include other minority occupancies like education or assembly. Therefore, the limits were established with typical mixes of these minority occupancies in mind to accommodate this diversity. Therefore, there is no need to make an adjustment to the limits for these kinds of mixed occupancy buildings.

#### What if my building contains a mixture of office and retail uses?

 If a building subject to the Limits is used for a mix of office occupancies and retail occupancies, which each have their own unique and very different targets, the City of Vancouver will calculate a custom GHGI limit for the building that reflects the mixed occupancy. This is done by calculating a weighted average between the limits for each occupancy. For more information about how weighted average GHGI limits are calculated see the technical program manual.

#### • What if my building contains residential occupancies?

- The intent of the GHGI and Heat Energy Limits is to only regulate commercial (non-residential) buildings. Therefore, any residential portions of a covered building may be excluded from the calculations for emissions and heat energy, provided the natural gas and district energy for the residential occupancies are also metered separately from the rest of the building.
- Note: If the residential section of the building is not separately metered, then the entire building will be subjected to the GHGI limits and Heat Energy Limits for the major occupancy of the building.



- Do the GHGI and Heat Energy Limits apply to natural gas or district energy used by residential space in buildings that are subject to the limits?
  - The GHGI and Heat Energy Limits do not apply to residential portions of a covered building. The City will exclude any separately metered or sub-metered natural gas or district energy your building used for residential occupancies from the emissions and heat energy calculations. Go to the Greenhouse Gas Intensity Limits How-To Guide for instructions on how to report residential gas or district energy usage for an adjustment.

#### • What do I do if my building uses natural gas for process loads?

- If your building uses natural gas for process loads and you have sub-metered data showing how much of your natural gas was used for this purpose, you may exclude this energy consumption from your building's GHGI by claiming this adjustment in the BPRS system. Go to the Greenhouse Gas Intensity Limits How-To Guide for instructions on how to report this energy for an adjustment.
- What do I do if my building contains a restaurant or commercial kitchen that uses natural gas?
  - If your building contains a restaurant or commercial kitchen that uses natural gas for cooking, and you have separately metered data showing how much of your building's natural gas consumption was used for this purpose, you may exclude this energy consumption from your building's GHGI by claiming this adjustment in the BPRS system. Go to the Greenhouse Gas Intensity Limits How-To Guide for instructions on how to report this energy for an adjustment.
- Will buildings subject to the GHGI Limits be given credit for using renewable natural gas or low carbon district energy?
  - The City of Vancouver will credit building owners for purchasing Renewable Natural Gas (RNG) or Low Carbon District Energy (LCDE) when calculating their buildings' performance against the GHGI Limits. Building owners that can demonstrate they used qualifying RNG and LCDE energy in the previous calendar year will have the value of that energy consumption subtracted from their building's total natural gas or district energy consumption (minus any adjustments for process loads or restaurant loads). Go to the Greenhouse Gas Intensity Limits How-To Guide for instructions on how to report this energy for an adjustment.

#### • What is the Carbon Emissions Operating Permit (CEOP)?

 Starting in 2027, buildings subject to GHGI Limits will need to acquire an annual carbon emissions operating permit or CEOP. Owners of these buildings will be required to submit their energy and carbon reports no later than June 1st and take out an annual Carbon Emissions Operating Permit (CEOP) no later than August 1<sup>st</sup>.



#### • What is the cost of a Carbon Emissions Operating Permit?

- Owners of a building must pay \$500 to the City for an annual Carbon Emissions Operating Permit fee for the whole building.
- What are the consequences of exceeding GHGI or Heat Energy Limits?
  - In addition to the \$500 base fee, owners of buildings that exceeded their GHGI limits will pay a fee of \$350 per tonne of CO2e that exceeds its limit to acquire a carbon emissions operating permit. Beginning in 2041, owners of buildings that exceeded their heat energy limits will pay a fee of \$100 per gigajoule for the heat energy exceeding the limit to acquire its carbon emissions operating permit.