

Benchmarking energy and water with BOMA BEST

It is possible to obtain points associated with performance metrics in the BOMA BEST questionnaire. Specifically, points can be awarded for the ability to calculate a weather-normalized site energy use intensity, water intensity and ENERGY STAR Score.

Energy and water consumption data can be entered in the BOMA BEST Online Portal or in an existing ENERGY STAR (or ES) account. In either case, it is necessary to specify your synchronization preference so that ENERGY STAR methodology can be used to calculate performance metrics.

Follow the instructions in this present document if you prefer to enter your energy and water consumption data in the BOMA BEST Online Portal.

If you prefer to enter your data directly into ES instead, follow [these instructions](#).

Overview

There are four steps to the process, all occur within the BOMA BEST Portal:



1. Identify at least one (1) space type in your building (for Office or ENERGY STAR Score-eligible Universal buildings)
2. Create meters for energy and water
3. Enter your consumption information for energy and water
4. Synch your account to Push with ENERGY STAR and enter all required information



1. Identify at least one (1) space type

This section is only required for Office buildings or for Universal buildings that are ENERGY STAR Score-eligible.

TIP: you cannot do this if your building is in “Pending” status. Contact BOMA for more details.

WARNING: You do not need to create a Space if your building is not an office or ENERGY STAR Score-eligible Universal building. Skip to Section 2.

- 1.1. Log in to you BOMA BEST account (<https://boma.credit360.com>)
- 1.2. Click on **Property** to show the My Properties list.

Building Name	ID	Street Address	Town	Gross...	Asset ty...	Status	Managm...	Pro...	Me...	Cer...	Cer...	Da
02_test3 (Nova Scotia) (Energy star Push test 18.09.2016) 22:27UKtime	402...	Church Street	Kings	1,000,...	Health Care	Payment overdue / Paiement en retard	To be assigned users/cor... company	Man...	Mem..	Bro...	25	2007

- 1.3. Click on the building name.
- 1.4. You are now on the building’s **Property Characteristics** page.
- 1.5. Click on the **Spaces** tab. (You do not need to create a Space if your building is not an office or ENERGY STAR Score-eligible Universal building. Skip to Section 2 if this is the case. These instructions are for ENERGY STAR Score eligible buildings only.)

- 1.6. Select the main space-type from the dropdown. For Office buildings, select the space type “Office”. We recommend creating only a single space that represents the entire building’s gross floor area. More details on space types and whether or not to create them are details in the [ENERGY STAR FAQ](#) in section 3.3.2. In regards to whether or not you should include a space specifically for “Parking”, see section 3.3.8 of the [ENERGY STAR FAQ](#) for details.



1.7. Enter the name of the space (something that is clear to you).

Certifications Questionnaire Payment **Spaces** Energy Consumed Energy Produced

New space

Name: ⓘ

Space type: ⓘ

Active:

Decommission date: ⓘ

or [Cancel](#)

1.8. Leave **Active** ticked.

1.9. Click **Save**. Space-related metrics will now be generated.

1.10. For the Office space-type, complete all metrics that are listed (with or without an asterisk). Click on **Click to add data** to complete the metric.

Certifications Questionnaire Payment **Spaces** Energy Consumed Energy Produced Water

Office Space Office Effective as of

Building Gross Floor Area (Space Metric) [Click to add data...](#)

Number of Computers [Click to add data...](#)

Number of Workers [Click to add data...](#)

1.11. Within each metric, enter the values required. You must enter an **effective as of** date that is older in time than the first date of the energy or water consumption data that will be entered. Tip: Pick an **effective as of** date that is very old (e.g. 10 years ago). Click **Add**.

Office Space Office Effective as of

Building Gross Floor Area (Space Metric)

Value	Note	Effective as of	
<input type="text" value="200,000"/> <input type="text" value="Square Feet"/>	<input type="text"/>	<input type="text" value="January 31, 2017"/>	<input type="button" value="Add"/>




2. Create meters for energy and water consumption

You must now enter your building's consumption data.

TIP: you cannot do this if your building is in "Pending" status. Contact BOMA for more details.

2.1. From the **Property Characteristics** page, click on the **Energy Consumed** tab.

Property characteristics [Change...](#)

	Address:	Canada
	Property Type:	Office - Office
	Gross Floor Area (for ENERGY STAR):	99,999 Square Feet
	ENERGY STAR Score:	-
	Total GHG emissions:	-
	Water Use Intensity :	-
	Weather-normalized Site Energy Use Intensity:	-

Certifications | Questionnaire | Payment | Spaces | **Energy Consumed** | Energy Produced | Water

2.2. Before entering the data, you must first create a meter. Complete the meter creation form as below:



Certifications | Questionnaire | Payment | Spaces | **Energy Consumed**

New meter: Energy Consumed

a. Meter name:
This is the name that will be shown to users to refer to your meter.

b.
The reference is optional but we recommend entering the number us

c. Type:

d. Unit:

e. What space does this meter supply?

f. How will the reading data be entered?:

g. Installation date:

h. Active:

Disposal date:

Note:

or [Cancel](#)

- Meter name:** Enter the meter name. For the sake of clarity (for you and the verifier), select an obvious name, for example “Grid electricity meter”.
- Reference:** If your meter has a reference number (internal), enter it here.
- Type:** Select the type of meter from the dropdown.
- Unit:** Select a Unit that has a blue ENERGY STAR logo beside it.

Unit:

What space does this meter supply?

How will the reading data be entered?: **Not one with this logo**

Note: **One with this logo**

- What space does this meter supply?** Always select **Whole building**, even if specific spaces have been identified in the “Space” tab. The only time when it is acceptable to select a sub-space is in the case of Data Centers. If a Data Centre space has been created, select this space type when creating meters for data center specific meters (e.g. “Power Distribution Unit Input Energy”).
 - How will the reading data be entered?** You have two options:
 - Select **Arbitrary period** (*preferred*) to enter the amount of energy or water consumed between two specific dates.
 - Select **Point in time** to enter a reading for a particular date. The system automatically calculates the consumption between the data points.
- WARNING:** You cannot change this selection once you have actually entered data.
- Installation date:** Select a date that precedes your first consumption period. This date must not be before the **effective as of** date identified in the space type details.
 - Active:** Leave this ticked. If the meter becomes inactive and you no longer want the consumption to be included in your overall intensity readings, unclick this box.



2.3. Click on the **Water** tab and perform the same steps to create a water meter.

Property characteristics [Change...](#)

	Address:	1 Dundas Street West, Suite 1801, Toronto, Canada
	Property Type:	Office - Office
	Gross Floor Area (for ENERGY STAR):	200,000 Square Feet
	ENERGY STAR Score:	-
	Total GHG emissions:	0 Metric Tons CO2e
	Water Use Intensity :	-
	Weather-normalized Site Energy Use Intensity:	-

Certifications | Questionnaire | Payment | Spaces | Energy Consumed | Energy Produced | **Water**

2.4. Click on the **Produced Energy** tab and perform the same steps to create an energy produced meter (if applicable) – this is not necessary for obtaining points in BOMA BEST.



3. Add energy and water consumption information

Now that the meter has been created, it is time to add data.

TIP: you cannot do this if your building is in “Pending” status. Contact BOMA for more details.

3.1. Click **Open** on the meter.

The screenshot shows the 'Whole building' interface. At the top, there is a table with columns: Description, Reference, Type, Last reading date, and Last reading value. The first row is for 'Fuel Oil Meter' (Type: Fuel Oil No 1 (Energy)) with a green status indicator and a 'Click to add data...' link. A red box highlights the 'Open' button next to it. Below this, a detailed view for 'Test diesel' (Type: Diesel (Energy)) is shown. It includes a green status indicator, the date 'August 25, 2016', and the value '100 Litres (Canadian Property Assumptions)'. A 'Close' button is visible. Below the detailed view, there is a table with columns: Estimate?, Reading date, Reading (Litres (Canadian Property Assumptions)), and Consumption (Litres (Canadian Property Assumptions)). The data row shows '±', 'August 25, 2016', and '100'. A red box highlights the 'Add meter reading' button at the bottom left. An 'Edit' button is at the bottom right, and a 'Show earlier readings' link is at the bottom right.

3.2. Click on **Add meter reading**

3.3. Indicate whether this data is an estimate or not. Please note that estimates cannot be accepted for calculating ENERGY STAR Scores (applicable to Office buildings and eligible Universal buildings).

3.4. Identify the period or the date of the consumption data (depending on what reading method was selected when creating the meter).

3.5. Enter the Reading data or the consumption data (depending on what reading method was selected when creating the meter).

3.6. Enter 24 consecutive months of energy consumption to obtain a weather-normalized site energy use intensity (EUI). Twelve months of data are required in the water section to obtain a water use intensity (WUI).



3.7. Users are encouraged to continuously enter consumption data in this section as it becomes available. The performance metrics (ENERGY STAR Score and Energy Use Intensity) will also change as a result of the new data.

4. Synchronize your account to Push with ENERGY STAR

4.1. From the building's **Property Characteristics** page, click **Change**. (TIP: you cannot do this if your building is in "Pending" status. Contact BOMA for more details)

Office Energy Test

Property characteristics [Change...](#)

4.2. Check that an accurate (approximate) value has been entered in **Year Built**.

* Local BOMA Association where the building is located: BOMA New Brunswick and Prince Edward Island

* BOMA Membership Status where building is located: Member


Year Built: 2007 Year as of January 1, 2004 [Changes...](#)

4.3. Ensure the **as of** date precedes the date of your first energy or water consumption meter entry (or an error will be generated). Tip: Pick an **as of** date that is very old (e.g. 10 years ago).

Year Built: 2007 Year **as of January 1, 2004** [Changes...](#)

4.4. Scroll down to the **Location** section. Enter an accurate and complete address by clicking on **Look up location** (necessary for the system to determine the nearest weather station).

Location

 [Look up location...](#)

4.5. Scroll down to the **ENERGY STAR** section.

Energy Star

No synchronization Pull from Energy Star Push to Energy Star

Data will be pulled from Energy Star into cr360 for this property.



4.6. Select **Push to Energy Star**. Leave the field called “Portfolio Manager ID” blank.

(Only select the “Pull from Energy Star” option if your building already has an ENERGY STAR account and if you prefer to enter consumption data directly into this ENERGY STAR account. If this is the case, please follow [these instructions](#) instead.

4.7. Scroll to the **Building Characteristics** section.

4.8. Enter the Gross Floor Area that should be used to calculate your energy and water performance (can differ from the amount entered to calculate fees).

The value entered here **MUST** include the following spaces:

- Lobbies
- Tenant Areas
- Common Areas
- Meeting Rooms
- Break Rooms
- Atriums (ground floor only)
- Restrooms
- Elevator Shafts
- Stairwells
- Mechanical Equipment Areas
- Basements
- Storage Rooms

The following spaces must **NOT** be included in this value:

- Exterior spaces
- Balconies
- Patios
- Exterior Loading Docks
- Driveways
- Covered Walkways
- Outdoor Courts (Tennis, Basketball, etc.)
- The interstitial plenum space between floors
- Crawl Spaces
- Parking (indoor or outdoor). Exceptions in section 7.4 of the [ENERGY STAR FAQ](#).



4.9. Ensure the **as of** date precedes the date of your first energy or water consumption meter entry (or an error will be generated). **TIP:** Pick an **as of** date that is very old (e.g. 10 years ago).


Building characteristics

Gross Floor Area (for ENERGY STAR): **400,000 Square Feet** as of **January 1, 2004** [Changes...](#)

4.10. Click **Save** at the bottom of the page

4.11. Within 24 hours, the property should perform its synchronization. Once this has been completed, you will see performance metrics in the Summary grey box on your **Property Characteristics** page. Synchronization is performed automatically every 24 hours. Only the values that appear in this summary can be used in the BOMA BEST questionnaire. The verifier will request to review this summary during the verification.

Property characteristics [Change...](#)

	Address:	1400 Park Rd S, Lakeview, Oshawa, ON, L1J 8M5, Canada
	Property Type:	Enclosed Shopping Centre
	Gross Floor Area (for ENERGY STAR):	400,000 Square Feet
	ENERGY STAR Score:	-
	Total GHG emissions:	0 Metric Tons CO2e
	Water Use Intensity :	2.18 m³/m²
	Weather-normalized Site Energy Use Intensity:	0.000 GJ/m²

4.12. Transcribe these values into the appropriate fields in you BOMA BEST questionnaire.

Select your preferred unit

What is the calculated weather-normalized site Energy Use Intensity (EUI) for this building? [Attach files...](#)

For more details on exactly what data must be provided to obtain performance values, consult the [ENERGY STAR FAQ](#).

Have questions about this process? Refer to the FAQ on the following pages.



FAQ

1. What kind of information is necessary to obtain the weather-normalized site Energy Use Intensity (EUI), Water Use Intensity (WUI) and ENERGY STAR Score (if applicable)?

Consult the ENERGY STAR Portfolio Manager FAQ for BOMA BEST buildings [here](#).

In short, to obtain a weather-normalized site EUI you must provide 24 consecutive months of energy consumption data, at a minimum. Consumption must be entered for each month (cannot be a bulk amount representing the complete 24-month timeframe). Enter consumption information for all fuel types used in the building. The entered data must not be any older than the past 36 months.

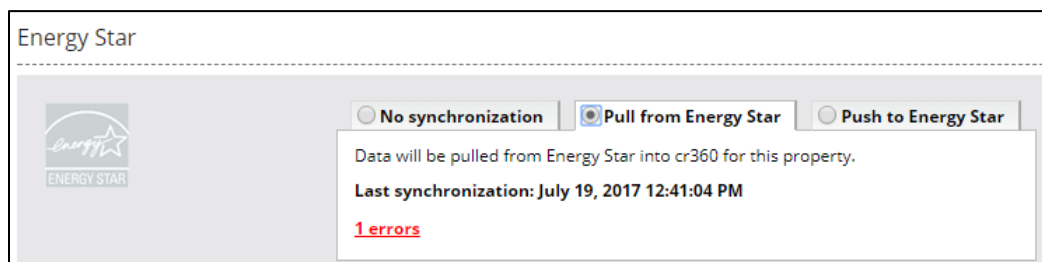
To obtain a WUI, enter water consumption data representing 12 consecutive months, at a minimum, for all meters (indoor and outdoor). The entered data must not be any older than the past 18 months nor should it represent consumption during periods of major renovations.

To obtain an ENERGY STAR Score, your building must be eligible (see the above FAQ) and your account must contain energy consumption data for 12 consecutive months, at a minimum.

2. Why haven't values appeared in the Summary grey box on the Property Characteristics page?

There could be a few reasons for this:

- You have selected Push in the ENERGY STAR section but 24 hours have not elapsed. Occasionally this may take more time.
- You selected Push in the ENERGY STAR section but also entered a Portfolio Manager ID (instead of leaving that space blank). This confuses the system and it is not able to correctly *push* the data. Delete the Portfolio Manager ID and click "Force refresh".
- The "as of" date for Year Built and Energy Star Gross Floor Area is not a date this is before your first meter entry. Modify the "as of" date. Click "Save" on the bottom of the Building Registration page.
- Errors have been found with the synching. Sometimes errors will appear in the ENERGY STAR section of the registration page. If you see an error, click on it. Follow the instructions to resolve them then click "refresh".





- e) If it none of the above have resolved the issue, and you have waited 24 hours since the last “Refresh”, email info@bomabest.org (include the name of your building as it appears in the BOMA BEST portal).

3. Why is there a Portfolio Manager ID on my building’s registration page?

Once the steps outlined in this document have been completed, the property will automatically synch with ENERGY STAR in order to generate the correct performance values within the BOMA BEST Online Portal. This auto-creates an ENERGY STAR account for the building in Portfolio Manager. You do not have access to this but it must exist in order to calculate your building’s performance. You will see the auto-created account number in the ENERGY STAR section of the registration page.

4. I have more questions about ENERGY STAR and BOMA BEST

Much more information on benchmarking in BOMA BEST is available in the [ENERGY STAR FAQ](#).