



A COMMON TARGET
FOR A SUSTAINABLE FUTURE

PARTICIPANT GUIDE

buildingenergychallenge.ca

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PART I – THE BUILDING ENERGY CHALLENGE

A COMMON TARGET FOR A SUSTAINABLE FUTURE

What is the Building Energy Challenge (BEC)?

The **Building Energy Challenge** is a friendly, stimulating competition that will take place over 4 years. The goal is to reduce energy consumption and greenhouse gas emissions in commercial, institutional and multi-residential buildings across Quebec through COLLABORATION, SHARING KNOWLEDGE and INNOVATION.

The Challenge is an initiative of BOMA Quebec in collaboration with the City of Montreal, and is aimed at owners and managers of buildings and their tenants who are interested in implementing responsible management practices to improve energy performance now and over the long term.

The BEC was inspired by other successful energy challenges in other big cities, particularly the Civic Action program *RACE TO REDUCE*, which took place in Toronto from 2011 to 2014. It was followed by *race2reduce*, which was launched in 2017 by BOMA Toronto. The BOMA Quebec project takes into account the Quebec context and the specific objectives of the Government of Quebec's Energy Policy 2030, which aims for a 15% improvement in energy efficiency and a 40% reduction in the consumption of petroleum products. The City of Montreal is also aiming to reduce greenhouse gas emissions in its sustainable development plan for 2016-20.

The BEC is a unique opportunity for collaboration between the government, municipalities, building owners and managers, along with their tenants and users, in order to reduce the environmental impact of buildings in Quebec.

Who is in charge of the BEC?

The Building Energy Challenge is designed, administered and managed by [BOMA Quebec](#), the largest association of commercial property owners and managers in Quebec. A leader in the field since it was founded in 1927, BOMA Quebec has established a reputation for excellence in property management. It actively encourages the adoption of efficient, responsible building management principles, notably with its BOMA BEST® program.

How long will the BEC program last?

It will take place over a 4-year period, i.e. from **2018** to **2021**.

What does it cost to register for BOMA Quebec's Building Energy Challenge?

It's free of charge!

Why should I participate?

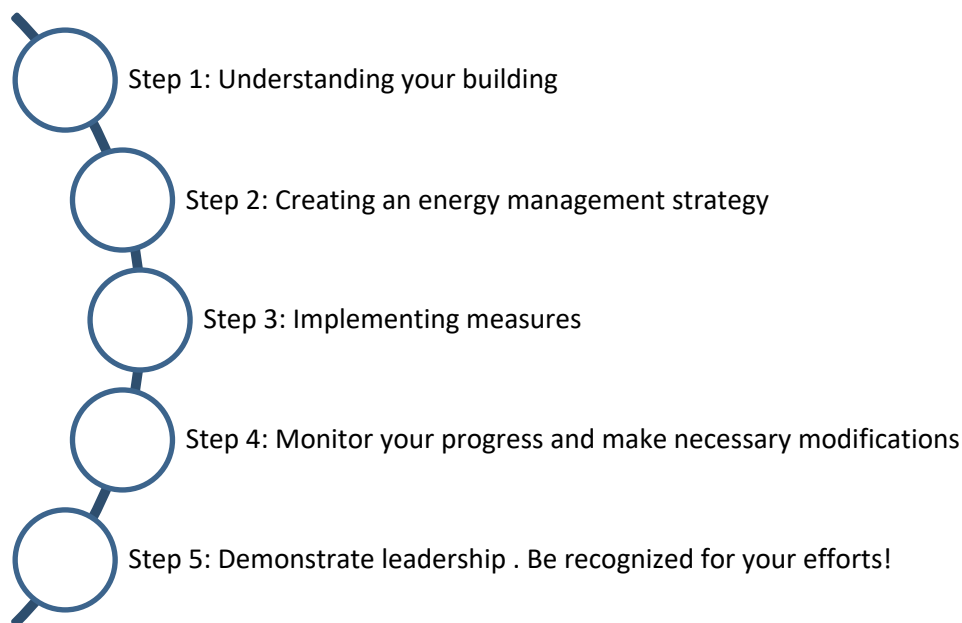
So that you can help build the future. In 2013 the building sector alone accounted for 30% of energy consumption, with commercial and institutional buildings accounting for half of that figure (15%). Residential, commercial and institutional buildings produce more than 10% of greenhouse gas emissions (GHG) in Quebec. Building managers and their tenants have a direct influence on energy efficiency and GHG emissions in commercial and institutional buildings.

The BEC is your chance to have a real impact on reducing energy consumption and GHG emissions, and also reduce your energy costs. Your participation represents a highly visible, lasting commitment, while improving energy efficiency and reducing operating costs. Once you have completed registration for the Challenge, many resources and complementary tools in the Participant's Guide will be accessible, thus helping you reach your objectives. Several awards will be given to highlight the initiatives of the top participants.

How do I sign up?

Go to www.buildingenergychallenge for more information and to register for the Challenge.

Once you have registered, you will receive a participant's kit for the Building Energy Challenge. It is a guide full of information and simple steps that will help you implement energy efficiency programs. Each of the 5 steps includes free resources and advice to assist you in reaching your energy reduction objectives and the successful completion of the BOMA Quebec Building Energy Challenge.



PARTICIPATION AND ELIGIBILITY

Who can participate?

The competition is open to all owners and managers of commercial, institutional and multi-unit residential buildings in Quebec. Everyone in this sector is thus invited to demonstrate leadership and to implement concrete measures to improve energy performance and reduce the carbon footprint of their buildings.

The [building categories](#) eligible for the BEC are as follows:

- Office buildings
- Retail buildings
- Education sector buildings
- Health care buildings
- Mixed-use buildings
- Multi-residential buildings
- [Universal buildings](#)

Do I need to be a member of BOMA Quebec or to become one in order to participate?

No. The Challenge is open to both members and non-members. We do, however, encourage you to join the association in order to benefit from all the advantages that BOMA offers (professional development programs, networking, best practices and defending the interests of the real estate industry).

Does my building need to be certified BOMA BEST® in order to take part?

No. The Challenge is open to both certified and non-certified buildings. We encourage you, of course, to seek certification. For more information about BOMA BEST®: [<https://www.boma-quebec.org/boma-best-en>].

What is the deadline for signing up for the BEC?

You can register at any time during the 4-year period. But in order to qualify for annual awards, you must comply with the deadlines for each given year.

LAUNCH OF BEC AND REGISTRATION: 23 MAY 2018		
Year 1	Deadline for registration and for sharing data for Year 1: 28 February 2019 Awards gala: spring 2019	Energy data: January to December 2018
Year 2	Deadline for registration and for sharing data for Year 2: 28 February 2020 Awards gala: spring 2020	Energy data: January to December 2019
Year 3	Deadline for registration and for sharing data for Year 3: 28 February 2021 Awards gala: spring 2021	Energy data: January to December 2020
Year 4	Deadline for registration and for sharing data for Year 4: 28 February 2022 FINAL GRAND GALA: spring 2022	Energy data: January to December 2021

In order to be eligible for the 2018 awards, registration of a building must be completed and information shared with the BEC before February 28, 2019. The reference year is 2018. It will serve as the point of departure for establishing your objectives for improving your building's energy efficiency, and also as the point of comparison to evaluate your future efforts and your overall energy performance. Take advantage of 2018 to prepare the implementation of your projects and to encourage tenants and colleagues to join you in the competition. The tools provided by the BEC will help you achieve those objectives. If you register after 2018, your reference year will be the year preceding the current year.

For subsequent years, registration of a building must be completed and data shared with the BEC by February 28 of the current year.

My portfolio also includes buildings outside the province. Can those buildings be entered in the competition?

The program is offered only to buildings located in Quebec. Other similar initiatives are underway in [Toronto](#) and [Manitoba](#). Visit their websites for more information.

I am already participating in another initiative or another challenge. Can I still take part in the BEC organized by BOMA Quebec?

Certainly. You can participate in several initiatives and competitions that have the same goals and objectives.

OWNERS

As an owner, can I enter a building but not any tenants in the competition?

Yes, you can. However, we encourage you to convince at least one tenant to sign up, since collaboration between owners and tenants is one of the fundamental principles of the program. Moreover, the energy consumption of tenants represents a substantial portion of your building's energy consumption, and your achievements in the building's common areas could be weakened without the commitment of your tenants.

As an owner, how can I convince my tenants to sign up for the BEC?

They have everything to gain by supporting you. There are several advantages to participating as a tenant: access to tools and targeted resources that could help reduce their energy bill; seminars and webinars on a multitude of subjects linked to the energy performance of buildings; information on government grants for retrofits, energy audits, etc.; a network of building industry professionals; sharing best practices and recognition for improved energy performance as a tenant. Collaboration between owners and tenants is essential when working to reduce the operating costs of a building.

What can I expect from my participation in the BEC, and how does it benefit me?

There are many advantages to participating in the program as an owner: access to tools and resources that can help reduce their energy bills; seminars and webinars on a multitude of subjects linked to a building's energy performance; information on government grants for retrofits, energy audits, etc.; access to a network of building sector professionals; sharing best building management practices plus an awards program for improved energy performance.

Improving the energy efficiency of your building will reduce not only your operating costs, but will also attract and help tenant retention by improving their well-being and productivity.

Everyone wins.

My building is of recent construction and meets LEED standards. Why should I participate?

A building constructed according to higher standards is no guarantee of better performance. In order to maximize the return on your investment, you should also pay attention to how you manage and operate your buildings on a daily basis, and explore ways of continually improving building performance.

TENANTS

I am a tenant. Can I sign up without the owner of the building?

The only way to participate without the owner of your building is if your consumption of electricity and natural gas is measured and billed separately. If that is not the case, you will need the data from an individual sub-meter and permission from the owner so that the distributor can revise the building's meter in order to record reductions for the purposes of BEC objectives. Even if you are eligible to participate yourself, you are strongly encouraged to convince the owner to register, since collaboration between owners and tenants is one of the fundamental principles of the program.

I am a tenant. How can I convince the owner to register for the program?

Tell him or her about the benefits of the BEC. There are several advantages to taking part in the program as an owner: access to tools and resources that can help reduce the energy bill, such as seminars and webinars on a multitude of subjects linked to a building's energy performance; sharing best building management practices, and also an awards program for improved energy performance. Owners can make improvements to the building, but tenants can also easily contribute to reducing operating expenses.

As a tenant, how do I benefit from participating in the BEC?

You can play an important, tangible role in reducing the environmental impact of the building where you are renting space. Meet with other tenants and collaborate with them and with the owner, sharing best practices and making your premises a better space for working and learning. As a tenant, you will also have access to tool kits, informative and educational webinars and other resources to help you and your team. Improving the energy efficiency of your premises will reduce not only your operating costs, but will also improve your well-being and your productivity.

PARTICIPANTS' DATA

Do I need to submit energy consumption data to participate?

Yes, data must be submitted. You must indicate energy consumption data (e.g. electricity, natural gas) over the **12 months** of the year preceding the prescribed deadline. See the [What is the deadline for registering in the BEC?](#) section for more details.

How do I submit energy consumption data for my buildings?

Throughout the Challenge, measuring participants' performance and making comparative analyses of energy consumption will be carried out by means of the free online tool provided by Natural Resources Canada, the [ENERGY STAR Portfolio Manager \(ESPM\)](#). When [signing up for the BEC](#), you must create an account for your building using that platform.

Consult the [comparative energy analysis](#) section of the guide book for instructions on how to enter your data. It lists the steps to follow, from creating your account to sharing data with the BEC.

- › If you are using the ESPM tool for the first time, follow [steps 1 to 4](#).
- › If you already have an ESPM account for your building, go directly to [step 3](#). The instructions will help you synchronize your account with the BEC (a necessary step to become eligible for awards and distinctions).

The ESPM tool also provides free [training resources](#) and webinars for optimal use of the software.

What do I do if my tenants have their own meters?

If that is the case, we suggest you encourage your tenants to create an ESPM account and share their profiles with you to ensure that all energy consumption in the building is taken into account. Consult [step 2.2](#) of the comparative energy analysis for information on creating rental space in the ESPM tool and how to link rental properties to the whole building.

What other information must be entered into the ENERGY STAR Portfolio Manager in order to take part in the BEC?

In addition to data on energy consumption, the following data must also be provided:

- [Building type](#)
- [Superficie brute](#)
- [Occupancy rate](#)
- [Types of use](#)
- [Operating hours](#)

Your energy consumption data and your gross floor area (GFA) will be used to measure the weather-normalized site energy use intensity (EUI), and GHG emissions, which are the indicators used to compare the energy performance of buildings participating in the BEC.

Your property use details, such as occupancy rate, type of use and operating hours, will be verified to determine whether the reduction in the energy consumption is linked to energy efficiency measures, and not to changes in property use. You must update these details for each year of the competition.

What is site EUI?

Site energy is the total amount of heat and electricity consumed by a building, as indicated in your utility bills. *Site EUI* is the energy consumption of the site divided by the surface area of the property in gigajoules (GJ) per square meter. That single common metric allows for comparisons of energy consumption in buildings of different sizes.

What is weather-normalized energy use and why is it different?

Weather-normalized energy use is the energy your building would have used under average weather conditions. Weather conditions from a given year might be much warmer or colder than average, so weather-normalized energy use takes that difference into account.

The BEC comparative analysis is based on the *site's weather normalized EUI*. Consequently, 12 consecutive months of energy consumption data are required to determine that value.

What if I don't submit my energy consumption data by the deadline?

Your building will be excluded from consideration for the awards bestowed that year.

What if my registration is incomplete?

Participants can fill out a registration form in several stages. For your application to be approved, however, it must be complete, i.e. it must have all the required data. All incomplete applications will be excluded.

AWARDS AND RECOGNITION

What sort of awards are offered?

BEC award categories are as follows:

TYPES OF AWARDS		INDICATOR/CRITERIA	NOTES
GHG TARGET (4 years)	<i>Emission Reduction</i> Silver: 10 - 1.9% Gold: 15 - 19.9% Platinum: 20%+	Metric tons of carbon dioxide equivalent (MTCO ₂ eq)	All categories
ENERGY PERFORMANCE (annual & 4 years)	<i>Biggest % reduction in energy use</i>	<u>Weather-normalized site energy use intensity</u> (GJ/m ²)	Per sub-category*
COLLABORATION	<i>Collaborative excellence</i>	As outlined in the Collaboration form completed by participants. Available on the BEC website.	All categories

* Sub-categories will be established to consolidate similar buildings within the same group.

GHG TARGET

This category is the very foundation of the competition. By the end of the year 2021, the target for all participants will be to reduce GHG emissions in their buildings by a minimum of 10% below the level it was at the time the building was registered in the competition. GHG emissions in 2021 will then be compared to the levels for 2018. Winners will be determined according to the percentage reduction achieved (10 – 14.9%, 15 – 19.9%, 20%+).

IMPROVING ENERGY PERFORMANCE

In this category, the percentage reduction of energy use intensity in buildings will be compared in order to identify those that have reduced energy consumption the most over the year. For this category, buildings will be grouped by similar vocation, surface area and energy consumption, and will compete with each other. Winners will be those that have reduced energy consumption the most in their category.

COLLABORATION

This applies to building managers and tenants who register together and who demonstrate ongoing collaboration. Registration is done online using the Collaboration form, and the criteria evaluated are: collaborative practices, commitment, positive impacts and the progress their initiatives have made.

How are energy savings verified?

Energy savings are validated by the BEC jury, which consists of energy efficiency specialists. On-site visits will be organized as needed. The jury reserves the right to conduct certain additional verifications before awarding a prize.

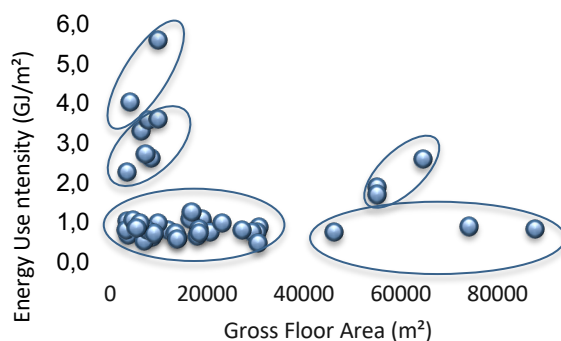
Can I apply for more than one award?

When you register for the BEC and submit your data before the deadline, your candidacy is automatically considered for the ENERGY PERFORMANCE and GHG TARGET awards. In order to be eligible for the COLLABORATION award, you must submit an application by completing the Collaboration form.

How will my building be compared with other buildings when determining award winners?

The criterion for the ENERGY PERFORMANCE awards is [weather normalized site energy use intensity](#). It allows for evaluation of a building's energy performance by taking weather conditions into account. The evaluation criterion for the GHG TARGET awards is the percentage of GHG emissions reduction in metric tons of CO₂ equivalents.

The ENERGY PERFORMANCE awards are determined by type of building and by sub-category. For the purpose of comparison, buildings are classified by size and current energy performance, establishing peer groups for the allocation of awards. The figure below provides an example of sub-categories or peer groups for the *Office Buildings* category:



The result is 5 sub-categories of participation based on building size and energy performance at the moment they registered for the competition (expressed as energy use intensity) in gigajoules per square meter, and the subcategories are determined once participants have registered for one year in the competition. That way, participants are not handicapped by the date they entered the competition or by unfair competition, given that in each year they are only competing with other participants with comparable energy performance in their size category.

How and where are awards given to participants?

An awards gala will be held each year to highlight winning initiatives. Winners in each category will be selected based on energy savings verified as described above.

Every year, certificates of participation will be distributed to acknowledge your commitment. The certificate will be given to all participants whose buildings are registered and whose data were entered before the deadline.

A GRAND GALA will take place in spring 2022 to announce and highlight the BEC champion buildings.

PUBLICITY, PROMOTION, SPONSORSHIPS

What sort of publicity will my organization receive by participating in the BEC?

By taking part in the Building Energy Challenge, participants agree to share data entered in their Energy Star Portfolio Manager accounts for the purpose of evaluating their energy performance. BEC may share that data with its partners, in a confidential and depersonalized fashion, to create a statistical census on the energy performance of Quebec buildings.

BOMA Quebec will not share or publicize a participant's data without his or her explicit consent. If you grant consent, your accomplishments may be shared with other participants and with the industry in general by means of special participant profiles, case studies, the BEC website, etc.

The results of the program will be shared via existing marketing and communication channels such as newsletters, industry magazines, social media, etc.

Will I receive tools that I can use to promote my BEC initiatives?

Yes. A visibility kit will be given to participants once the ESPM data has been completed and their participation in the BEC becomes official. Participants are encouraged to highlight their leadership and their participation in the Challenge, and are free to make that choice or not.

The kit will include items such as web banners, other banners and suggestions for messages to post on social media, visuals to add to e-mail signatures, BEC logos in different formats, examples of letters sent to tenants, self-supporting banners to display in building lobbies (\$), etc. If a participant chooses to produce promotional elements, the cost is to be borne by the participant.

Can I become a BEC sponsor?

Yes. There are many ways of supporting the BEC. For more information or to receive the BEC partnership plan, contact executive director Linda Carbone at **514 282-3826, extension 2012**.

PROGRAM MEANAGEMENT

If you have any questions or requests for support, please contact the persons listed below:

REGISTRATION AND INFORMATION

Marie-Claude Fontaine

Coordinator, Building Energy Challenge

514 282-3829 ext. 2007

info@defienergie.ca

GENERAL MANAGEMENT, SPONSORSHIPS AND PARTNERSHIPS

Linda Carbone

Executive Director

514 282-3829, ext. 2012.

lcabone@boma-quebec.org

MEDIA & PRESS RELATIONS

Valérie Gonzalo

Media Relations Manager

514 626-6976

média@defienergie.ca

PART II - COMPARATIVE ENERGY CONSUMPTION ANALYSIS

OVERVIEW

The comparative energy consumption analysis in the Building Energy Challenge is carried out using the [ENERGY STAR Portfolio Manager \(ESPM\)](#). This section provides information on the data required for measuring the energy use intensity (EUI) of a site normalized for weather conditions.

Follow the instructions in this document for entering your data and sharing information in your BEC account.

There are 4 steps:



If you already have an ESPM account, go directly to step 3.

To register your building, you will need the following information:

Basic information (required for the BEC)

- [Type of building](#) (main function)
- Name, street address, postal code
- Year of construction
- [Gross floor area](#)
- [Occupancy rate](#)

At least 12 months of energy consumption data (required for the BEC):

- Public utility bills specific to the property for all sources of energy purchased and in place.

Details of property use:

- [Types of use](#) (required for the BEC)
- [Operating hours](#) (required for the BEC)
- Percentage of gross floor area that is air conditioned
- Percentage of gross floor area that is heated
- Number of workers, etc.

Use the [data collection assistant](#) in Portfolio Manager to generate a PDF file and rapidly collect data based on the type of property owned.

The following pages will help guide you step by step in simple, straightforward fashion. Let's go!

1. Create your ESPM Account

1.1. Visit <https://portfoliomanager.energystar.gov/pm/signup?lang=en>.

The "Create an Account" page will appear. Follow the instructions. In the "Reporting Units" section, select **Metric units**. In the "Searchability" section, click **Yes**.

About Yourself

First Name: *

Last Name: *

Job Title: *

Email: *

Confirm Email: *

Note: We never share your email address with third parties.

Phone: *

Country: * Select Country

Language: English

Reporting Units:

☐ Conventional EPA Units (e.g., kBtu/ft²)

☒ Metric Units (e.g., GJ/m²)

Searchability in Portfolio Manager

Can other people search for you and send you a [connection request](#)?

☒ Yes

☐ No

Once the information has been entered, click on **Create my account**.

1.2. You will receive an e-mail with an activation link to verify your e-mail address.

The link will remain active for 24 hours. If you do not click on the link within 24 hours, you will have to restart the account creation process.

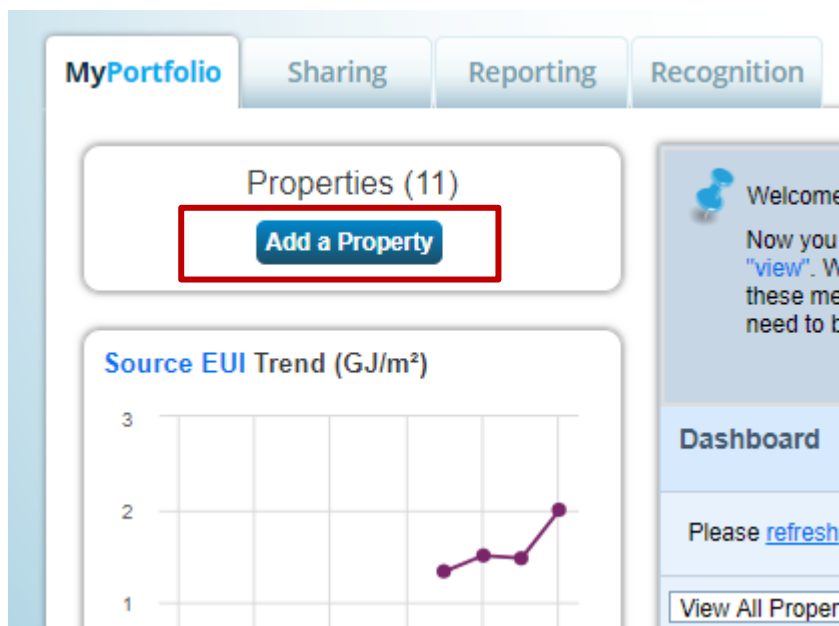
1.3. Once your account has been created and validated, proceed to step 2.

2. Register your building in the ESPM

Follow the instructions in section 2.1 if you are an owner, or in section 2.2 if you are a tenant.

2.1 Owners

2.1.1. In the "My Portfolio" tab, click on "Add a property".



2.1.2. On the "Configure a property" page, follow the instructions and select the type of property that best describes your building. You can register an entire building or part of a building.

Building Type

You will be asked to identify your building per type compatible with ENERGY STAR. More than 80 types of properties are indicated in ESPM. Property types are listed [here](#). Click on the category that best describes how most of your building functions. From there you can see the types of properties in each category, how they are defined and the data that must be entered for a comparative analysis of your building in ESPM. If your property does not completely correspond to the types of properties listed, choose the type of property that closely resembles yours. If your property does not correspond to any of the categories, indicate "Other".

Set up a Property: Let's Get Started!

Properties come in all shapes and sizes, from a leased space in a large office building, to a K-12 school with a pool, to a large medical complex with lots of buildings. Since there are so many choices, Portfolio Manager can walk you through getting your property up and running. When you're done, you'll be ready to start monitoring your energy usage and pursue recognition!



Your Property Type

We'll get into the details later. For now, overall, what main purpose does your property serve?

Select a property type

[Learn more about Property Types.](#)



Tip

To set up a property, you'll need information such as [gross floor area](#) and [operating hours](#).



Your Property's Buildings

How many physical buildings do you consider part of your property?

- ☐ **None:** My property is part of a building
- ☐ **One:** My property is a single building
- ☐ **More than One:** My property includes multiple buildings ([Campus Guidance](#))

How many?



Tip

Not sure what kind of property you are? Because we focus on whole building benchmarking, you want to select the property type that best reflects the activity in the majority of your building. Don't worry if you have other tenants with different business types, just select the main activity.



Your Property's Construction Status

Is your property already built or are you entering this property as a construction project that has not yet been completed?

- ☒ **Existing:** My property is built, occupied and/or being used. I will be using Portfolio Manager to track energy/water consumption and, perhaps, pursue recognition.
- ☐ **Design Project:** My property is in the conceptual design phase (pre-construction); I will be using Portfolio Manager to evaluate the energy efficiency of the design project.
- ☐ **Test Property:** This is not a real property. I am entering it to test features, or for other purposes such as training.



Test Properties

You may want to enter a property into Portfolio Manager that isn't actually a "real" property, either to familiarize yourself with features or maybe to train other people. By telling us this a "Test" property, we can give the option of including this property in your portfolio-level metrics, charts and table or not, depending what your needs are. This can be configured on your [Account Settings](#).

Get Started!

[Cancel](#)

Once the information has been entered, click on **Start**.

2.1.3. The "Configure your Property" page asks for basic information about the property. Enter the data requested.

Notes:

- Select the unit of measure (m² or sq. ft.) for the gross floor area of your building.
- There is no need to register any irrigated areas.

About Your Property

Name: *

Country: *

Street Address: *

City/Municipality: *

State/Province: *

Postal Code: *

Year Built: *

Gross Floor Area: * ☐ Temporary Value

Gross Floor Area (GFA) is the total property floor area, measured from the principal exterior surfaces of the building(s). Do not include parking. [Details on what to include.](#)

Irrigated Area:

Occupancy: * %

Gross

Floor Area

Enter the surface area (called gross floor area or GFA in ESPM), for data on energy and water consumption. According to the BOMA standard method of floor measurement, this is called the rentable area. The gross floor area **must include** the following spaces:

- Lobbies
- Areas occupied by tenants
- Common areas
- Meeting rooms
- Break rooms
- Atriums (ground floor only)
- Toilets
- Elevator shafts
- Stairwells
- Mechanical rooms
- Basements
- Storage rooms
- Laundry rooms

Spaces that are **not to be included** in the gross floor area:

- Outdoor spaces
- Balconies
- Patios
- Outdoor loading docks
- Entrances
- Covered walkways
- Exterior courtyards (tennis or basketball courts, etc.)
- In-wall and in-ceiling plumbing and ventilation shafts
- Crawl spaces
- Parking areas (indoor and outdoor)

For more information, consult the [What should I include in my GFA?](#) section of the ESPM website.

2.1.4. Check the boxes that apply to your situation.

Do any of these apply?

☐ My property's energy consumption includes [parking](#) areas

☐ My property has drive-through bank services

Tip

Answering these simple questions will help us guide you in entering your property correctly.

Back

Continue [Cancel](#)

2.1.5. On the "Configure a property" page you will be asked for Property Use Details. Enter the requisite data and click on Continue.

Property Use Detail	Value	Current As Of	Temporary Value
Gross Floor Area	* 100,000 Sq. Ft. ▼	1/1/1975	<input type="checkbox"/>
Weekly Operating Hours	65 <input type="checkbox"/> Use a default	1/1/1975	<input type="checkbox"/>
Number of Workers on Main Shift	230 <input type="checkbox"/> Use a default	1/1/1975	<input type="checkbox"/>
Number of Computers	<input type="text"/> <input type="checkbox"/> Use a default	1/1/1975	<input type="checkbox"/>
Percent That Can Be Heated	<input type="text"/> <input type="checkbox"/> Use a default	1/1/1975	<input type="checkbox"/>
Percent That Can Be Cooled	50 % or more ▼ <input type="checkbox"/> Use a default	1/1/1975	<input type="checkbox"/>

Save Use [Cancel](#)

You have now created your property. You can now:

- Share your property with the BEC ([Step 3](#))
- Add data on energy consumption in order to obtain energy performance metrics ([Step 4](#))

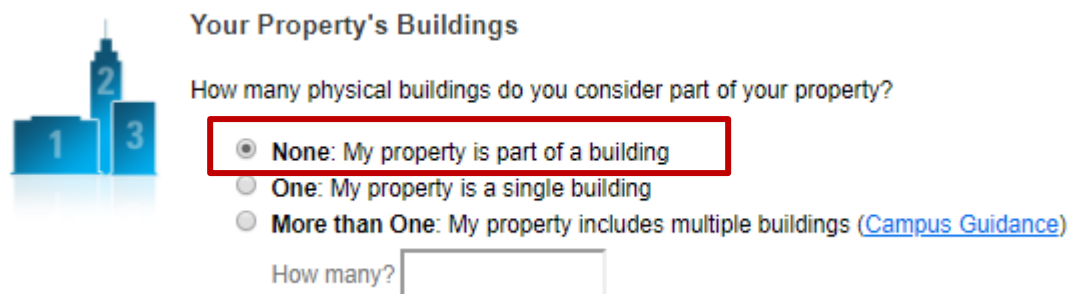
Tenants

Users of Portfolio Manager enter information at the "Property" level. A property can be an entire building, a group of buildings, an individual rental space, or even a common area in a building. This section explains how to set up a tenant space and how to link rental spaces to the building as a whole.

If you are a tenant and you have a meter that is separate from the rest of the building, you can enter your space individually and then share your space with the owner of the building, so long as the latter also has an ESPM account. Consult [Step 1](#) to learn how to create an ESPM account.

2.1.6. Enter your Tenant Space

- › Follow [steps 2.1.1. to 2.1.5.](#)
- › On the "Configure a Property" page, select the option that indicates that your property is part of a building.



Your Property's Buildings

How many physical buildings do you consider part of your property?

☒ **None:** My property is part of a building

☐ **One:** My property is a single building

☐ **More than One:** My property includes multiple buildings ([Campus Guidance](#))

How many?

- › On the "Configure a Property" page you will be asked for basic information about the property. Enter the requisite data about your tenant space. Enter the usable area (in square metres) of the space, including all zones inside the exterior walls and/or common walls that define the perimeter of the rental space.

- › On the "Configure a Property" page you will be asked for Property Use Details. Enter the requisite details of use outlining operations in the tenant space.
- › Enter energy consumption (and/or water, waste collection) for the space.

Word of Advice

Use a naming convention that facilitates recognition of the relationship with other properties in the building (e.g. the other rental spaces and common spaces), as well as an overview of the entire building. For example, if you create several rental spaces in the same building, you can name them as follows:

- 100 Main St. - Suite 100
- 100 Main St. - Suite 200

2.1.7. Share your Tenant Space with your Landlord

Monitoring the total energy consumption of the building is important in determining energy efficiency and it is also required for the BEC. For that reason, your landlord may ask for energy consumption data and use that data. Sharing with the Portfolio Manager is a simple means of providing that information and keeping it up to date.

[Click here](#) to find out how to share your properties with other Portfolio Manager users, or consult [Step 3](#).

2.1.8. Create a Group

This function is useful for tenants with several premises rented in a building and also for owners wanting to post, share or indicate in Portfolio Manager data about tenants' properties alongside data for the entire building.

Creating a "group" within your Portfolio Manager account allows you to place all the rental spaces in a single building that you manage (and potentially the entire building and/or the common area). To create a group:

Select Add / Modify / Delete groups.

Dashboard (Metrics current as of 05/08/2018 08:23 AM EDT)

Search by ID or Name

View All Properties (11) Points saillants - énergie Refresh Metrics

[Add/Edit/Delete Groups](#) [Add/Edit/Delete Views](#)

MyPortfolio Sharing Reporting Recognition


Create a Group of Properties

To organize your properties into groups, first create a group name and then select each property to be assigned to that group. To make this group your default, select the appropriate checkbox.

- Create a Name for the Group:**
Please enter a name for the group that you are creating. The name can be anything that you want and will only be seen by you unless you share the group.
Group Name: *
- Select Properties to Add to the Group:**
Which properties do you want to add to the group? You can use the filter options to help find the exact properties that you want.
[Select Properties](#) [Selected Properties: 2](#)
- Use this Group as the Default on My Portfolio:**
☐ Yes ☒ No

[Create](#) [Cancel](#)

- › Follow the steps for naming your group. Select the properties you wish to add, and decide whether you want the group to be the default setting when you log on.
- › Click on Create. The group will appear in the scrolling menu. In our example, we have called the group "Tenant Spaces".

Dashboard (Metrics current as of 05/08/2018 08:23 AM EDT) 

Search by ID or Name

View All Properties (11) ▾ Points saillants - énergie ▾ **Refresh Metrics**

View All Properties (11)
Properties not in a Group (9)
My Properties (11)
Tenant Spaces (2)


[Add/Edit/Delete Views](#)

	Energy Current Date	ENERGY STAR Score	Site EUI (GJ/m ²)	Source EUI (GJ/m ²)
Bibliothèque 6277375	12/31/2017	NA	1.13	1.82
Exemple d'un édifice à bureaux (Canada) 6277381	12/31/2017	21	1.19	2.08

3. Share your Building with BEC

3.1 Connect your ESPM account with the BEC account

3.1.1. In the upper right corner of the Home page, click on **Contacts**.

 **ENERGY STAR® PortfolioManager®**

Welcome krousseau: [Account Settings](#) | [Notifications](#) | [ENERGY STAR Notifications](#) | **Contacts** | [Help](#) | [Sign Out](#)

MyPortfolio | [Sharing](#) | [Reporting](#) | [Recognition](#)

3.1.2. The "My Contacts" page will appear. Click on "Add Contact".

My Contacts **Search for new contacts**

This is where you keep track of your contacts and/or organizations (i.e. people or companies associated with your properties such as Professional Engineers, Registered Architects, or others with whom you share information). You can add anyone as a contact, regardless of whether they have a Portfolio Manager account and you can share your properties & reports with any of your **connected** contacts. You can "connect" to other Portfolio Manager users by searching for their accounts and sending a connection request.

[Share](#) [Edit](#) [Delete](#) **[Add Contact](#)** [Add Organization](#)

All	Name	Organization
F		

3.1.3. The "Add Contact" page will appear. In the Organization box, enter **BOMA QUEBEC** and click on Search.

Add Contact

There are two ways to add a contact. First, search below to see if the contact you would like to add has a Port Connection Request, and when they accept the request, they will be added to your Contacts. Second, if the contact has a Manager account, then you can create an entry within your personal contacts.

Find Contact in Portfolio Manager

Search using any of the criteria below.

Name:

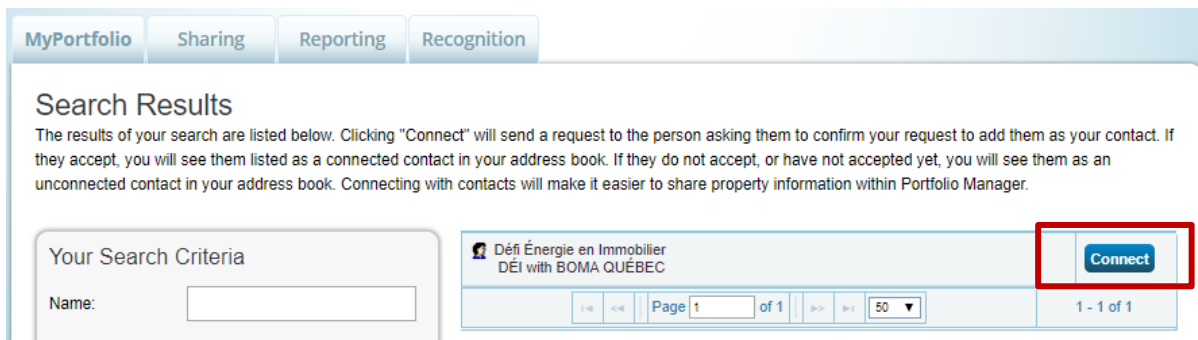
Organization:

Username:

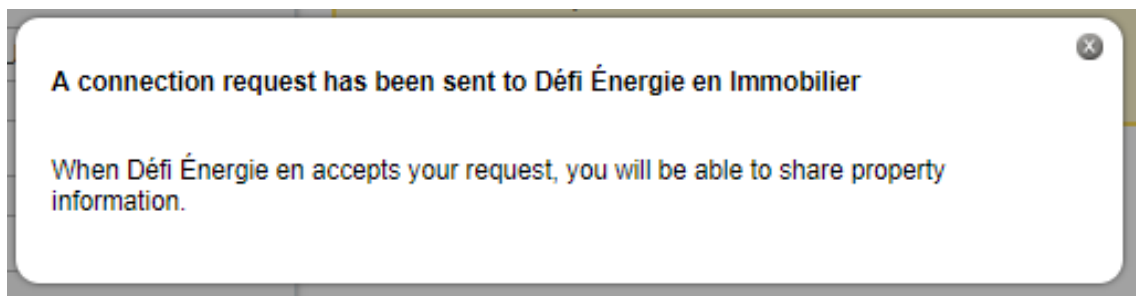
Email:

[Cancel](#)

3.1.4. Find "Défi énergie en immobilier" in the search results and click on Connect.



3.1.5. You will receive confirmation from the system. Allow at least 24 hours for your connection request to be approved.



3.1.6. Once your request for a connection has been approved, notification will be posted on the Energy Star home page or on your notification page.

MyPortfolio Sharing Reporting Recognition

View All Notifications (1)

Incoming Requests (0) Outgoing Requests (0) Notices (1)

Type	Notification	Date	
	You are connected to Défi Énergie en Immobilier .	5/8/2018	

Page 1 of 1 100 View 1 - 1 of 1

Close

3.2. Authorize sharing with BEC

Now that you are connected to your account, it's time to *share* your building with the BEC account.

3.2.1. Open the "Sharing" tab and click on "Share a Property".

MyPortfolio **Sharing** Reporting Recognition

My Shared Properties (4)

Share (or Edit Access to) a Property

Set Up Web Services/ Data Exchange

Download Sharing Report

Sharing Notifications (0)

You have no new notifications.

3.2.2. The "Share" page will appear.

- In the "Select properties to be shared" section, indicate whether you want to share a single property, multiple properties or all properties.
- In the "Select persons (accounts) you want to share with" section, select **Défi énergie en immobilier (dei_bomaquebec)**.
- In the "Choose Permissions" section, select **Custom Access & Exchange Data**.
- Click on **Continue**.

Share (or Edit Access to) Properties

Sometimes it's really important to be able to share your property with someone else. Maybe they need to help (perhaps automatically) or process applications for recognition. If this sounds like what you need, start out by selecting who you'd like to share with them. If you have already shared properties, you can also use this form to edit permissions.



Select Properties

We'll get into the details of the level of access later. For now, which properties do you want to share and/or edit access to?



Select People (Accounts)

Which people (accounts) do you want to share these properties with (or modify their current access to)? The access for each can be different and you'll be able to specify that on the next page.

Select contacts from my contacts book:

To select multiple contacts, hold down your Control (CTRL) key and click on each selection. Only your [connected contacts](#) appear in this list.



Choose Permissions

If you only need to choose one permission (because you are doing a single share or you want to give the same permissions for all of your shares), select "Bulk Sharing." If you need to assign different permissions or share with Data Exchange providers, select the 2nd option.

* ☐ **Bulk Sharing ("One-Size-Fits-All")** - I only need to choose one permission (either because I am doing a single share OR I want to choose the same permission for all of my share requests).

☒ **Personalized Sharing & Exchange Data ("Custom Orders")** - I need to give different permissions for different share requests, and/or I need to give [Exchange Data](#) permission.

[Continue](#)

[Cancel](#)

3.2.3. The "Share Property (ies)" page will appear. For each property, authorize Building Energy Challenge with permission to have Custom Access.

MyPortfolio

Sharing

Reporting

Recognition

Share Your Property(ies)

To finish up, tell us what type of access the people you have selected should have for each of the properties that you have selected. The option to exchange data is only available for authorized accounts.

4

Select Permissions for Each Contact

The access levels you select do not have to be the same for each property or each person.

Sort by: Property Name

Name (ID)	No Access	Read Only Access	Full Access	Custom Access	Exchange Data
Office 2 (6290450)					
Défi Énergie en Immobilier				<input checked="" type="radio"/> Edit	

NEW Who gets to [Share Forward](#)?

Full Access - Automatically includes "Share Forward" rights

Read Only - Automatically does NOT include "Share Forward" rights

Custom - You decide, along with the individual permissions for property, meter, goals and recognition permissions.

Exchange Data - You decide, along with the individual permissions for property, meter, goals and recognition permissions.

Some of your contacts already have access to the properties you selected. When you select "Share Property(ies)" their access levels will be changed. No acceptance is required.

Share Property(ies)

[Cancel](#)

3.2.4. A new window will open. Choose the "Read Only Access" option for all items (for the Access Level item, you can select "None").

Select Custom Access Permissions to [Office 2](#) for [Défi Énergie en Immobilier](#)

Select the permission level below that you would like to grant [Défi Énergie en Immobilier](#) for each category.

Item	None	Read Only Access	Full Access
Property Information	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
▼ All Meter Information	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
▼ Energy Meters			
Compteur d'électricité du réseau	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Gaz naturel	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Goals, Improvements, & Checklists	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Recognition	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

About Permissions
Select permissions for each category. You must provide Read Only or Full Access to the Property Information to share a property.

Property Information
Includes access to everything on Summary, Details, and Design tabs and all metrics for this property through the Reporting tab, even if you choose None for some of the other options.

- If you want someone to add & delete meters, you need to choose "Full Access" for Property Information

All Meter Information
Includes access to the Meters tab.

- None – suppresses access to

3.2.5. Select "Yes" (very important) in the "Share Forward" box and click on Apply Selection.

Additional Options:

Item	Yes	No
* Share Forward Allow Défi Énergie en Immobilier to share this property with others and give them any permissions that he/she has, including the right to share with more people.	<input checked="" type="radio"/>	<input type="radio"/>


- None – suppresses access to the Meters tab, so the person can't see your individual meters & bill entries. But annual metrics (based on the sum of these bills) are still accessible via Reporting.
- Read Only – provides access to view meter entries, but not make any edits.

Apply Selection

[Cancel](#)

3.2.6. Then click on Share Property (ies).

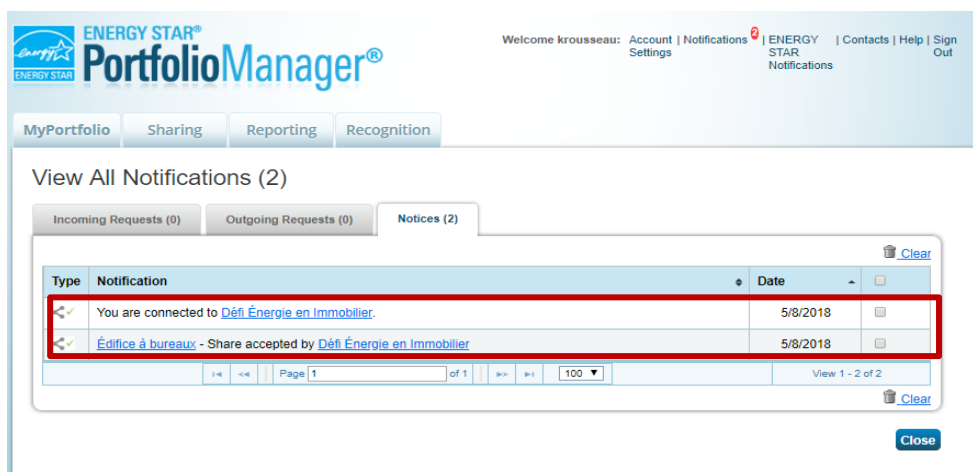
Name (ID)	No Access	Read Only Access	Full Access	Custom Access	Exchange Data
▼ Office 2 (6290450)					
Défi Énergie en Immobilier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> Edit	

 Some of your contacts already have access to the properties you selected. When you select "Share Property(ies)" their access levels will be changed. No acceptance is required.

[Share Property\(ies\)](#)

[Cancel](#)

3.2.7. Once *Building Energy Challenge* has accepted your request, you will see the following notification on your home page:



The screenshot shows the ENERGY STAR Portfolio Manager interface. The user is logged in as 'krousseau'. The 'Notifications' tab is active, showing two notifications. The second notification, 'Édifice à bureaux - Share accepted by Défi Énergie en Immobilier', is highlighted with a red box. The notification table has columns for Type, Notification, and Date.

Type	Notification	Date
✓	You are connected to Défi Énergie en Immobilier .	5/8/2018
✓	Édifice à bureaux - Share accepted by Défi Énergie en Immobilier	5/8/2018

For more information about sharing data with other ESPM users, [click here](#).

4. Enter your Energy Consumption Data

4.1. In the My Portfolio tab, click on your property:

MyPortfolio | [Sharing](#) | [Reporting](#) | [Recognition](#)

Properties (11)

[Add a Property](#)

Source EUI Trend (GJ/m²)

Manage Portfolio

Welcome to Portfolio Views!

Now you can see an overview of your portfolio's performance right from this page by using a "view". We have set up one view to get you started, Energy Highlights. If you would like to see these metrics, please [Refresh Metrics](#) or, you can [set up your own customized views](#). Views need to be refreshed to see your most recent metrics.

[Clear Message](#)

Dashboard (Metrics current as of 05/08/2018 08:23 AM EDT) [Refresh Metrics](#)

Search by ID or Name

View All Properties (11) | Points saillants - énergie

[Add/Edit/Delete Groups](#) | [Add/Edit/Delete Views](#)

Name	Energy Current Date	ENERGY STAR Score	Site EUI (GJ/m ²)	Source EUI (GJ/m ²)
Bibliothèque 6277375	12/31/2017	NA	1.13	1.82
Exemple d'un édifice à bureaux (Canada) 6277381	12/31/2017	21	1.19	2.08

4.2. Click on the Energy tab and then on Add a Meter.

MyPortfolio | [Sharing](#) | [Reporting](#) | [Recognition](#)

Exemple d'un édifice à bureaux (Canada)

123 rue Main Street, Toronto, ON M5G1A1 | [Map It](#)

Portfolio Manager Property ID: 6277381

Year Built: 1975

[Edit](#)

ENERGY STAR Score (1-100)

Current Score: 21

Baseline Score: 20

Summary | Details | **Energy** | Water | Waste & Materials | Goals | Design

Meter Summary

2 Energy Meters Total

2 - Used to Compute Metrics

[Add A Meter](#)

Current Energy Date
Dec 31, 2017

[Enter Your Bills](#)

Energy Use by Calendar Month

Site Energy (GJ)

Export Data by Calendar Month

Four Ways to Enter Bill Data

1. Manually
2. Use our [simple spreadsheet](#) (one meter) to upload or Copy/Paste
3. Use our [complex spreadsheet](#) (multiple meters + multiple properties)


Meters - Used to Compute Metrics (2)


[Change Meter Selections](#)

[View as a Diagram](#)

[Add A Meter](#)

4.3. Select the sources of energy for your property, enter the number of meters and click on Start.





Sources of Your Property's Energy

What kind of **energy** do you want to track? Please select all that apply.

- ☒ Electric
 - ☐ purchased from the grid
 - ☐ generated onsite with my own solar panels
 - ☐ generated onsite with my own wind turbines
- ☒ Natural Gas
 - How Many Meters?
- ☐ Propane
- ☐ Fuel Oil (No. 2)
- ☐ Diesel
- ☐ District Steam
- ☐ District Hot Water
- ☐ District Chilled Water
- ☐ Fuel Oil (No. 4)
- ☐ Fuel Oil (No. 5 and No. 6)
- ☐ Coal (anthracite)
- ☐ Coal (bituminous)
- ☐ Coke
- ☐ Wood
- ☐ Kerosene
- ☐ Fuel Oil (No. 1)
- ☐ Other:

Get Started! [Cancel](#)

4.4. Select the Appropriate Measurement Units (m³ for natural gas, kWh for electricity).

Note: For the Date when the meter became active, enter the first day of your first bill for the 12-month period that will be your reference base (e.g. January 1, 2018).

About Your Meters for Exemple d'un édifice à bureaux (Canada)

Enter the information below about your new meters. The meter's *Units* and *Date Meter became Active* are required. You can also change the meter's name.

2 Energy Meters for Exemple d'un édifice à bureaux (Canada) (click table to edit)

<input type="checkbox"/>	Meter Name	Type	Other Type	Units	Date Meter became Active	In Use?	Date Meter became Inactive	Enter as Delivery?
<input type="checkbox"/>	Natural Gas	Natural Gas ▼		<div>ccf (hundred cubic feet) cf (cubic feet) Cubic meters GJ kBtu (thousand Btu) kcf (thousand cubic feet) MBtu/MMBtu (million Btu) MCF (million cubic feet) therms</div>		<input checked="" type="checkbox"/>		<input type="checkbox"/>
<input type="checkbox"/>	Electric Grid Meter	Electric - Grid				<input checked="" type="checkbox"/>		<input type="checkbox"/>

[Delete Selected Entries](#)
[Add Another Entry](#)

Back

Create Meters

Cancel

4.5. Once your meters have been entered, enter your energy consumption information.

Your Meter Entries for Exemple d'un édifice à bureaux (Canada)

Now we need actual energy consumption information in order to start providing you with your metrics and, possibly, your score!

2 Energy Meter(s) for Exemple d'un édifice à bureaux (Canada)

▼ Natural Gas

Start Date	End Date	Usage Cubic meters	Total Cost (\$)	Estimation
Click to add an entry				

4.6. After entering your data, enter the meters to be included for calculating the metrics and click on "Apply Selections".

You will receive notification confirming that your meters have been added.

Select Meters to Include in Metrics

Tell us which meters to include when calculating the metrics for [Exemple d'un édifice à bureaux \(Canada\)](#) so that we can provide you with the most accurate metrics possible.

Summary

4

Meters representing the total energy consumption for [Exemple d'un édifice à bureaux \(Canada\)](#) (a single building).



About Sub-meters

If you have sub-meters to measure energy or water consumption for a specific purpose, and you also have a master meter (which measures total consumption), counting both of those meters would double count your consumption and skew your metrics (e.g., artificially increase your Site Energy Use Intensity). [Learn More about configuring meters for performance metrics.](#)

.....

Energy Meters

Select all meters to be included in your metrics. (Hint: Most meters should be included unless they are [sub-meters](#).)

<input type="checkbox"/>	Name Meter ID	Type
<input checked="" type="checkbox"/>	Electric Grid Meter / Compteur électricité du réseau 40722622	Electric - Grid
<input checked="" type="checkbox"/>	Natural Gas / Gaz naturel 40722623	Natural Gas
<input checked="" type="checkbox"/>	Natural Gas 42220229	Natural Gas
<input checked="" type="checkbox"/>	Electric Grid Meter 42220230	Electric - Grid

Total of 4 meter(s). Tell us what this represents:

- * ☒ These meter(s) account for the total energy consumption for [Exemple d'un édifice à bureaux \(Canada\)](#) (a single building).
- ☐ These meter(s) do not account for the total energy consumption for [Exemple d'un édifice à bureaux \(Canada\)](#) (a single building).

4.7. You can now analyze your progress by using the performance documents, graphs and reports.

- Use the Portfolio Manager [Data Quality Checker](#) to verify the quality of your data and to detect any possible errors.
- Consult the Natural Resources Canada [Energy Benchmarking Roadmap - A Plan to Move Forward](#).
- To learn more about adding properties, entering data and generating reports, consult the Portfolio Manager [Quick Start Guide](#).
- For more information on data entry for public utilities, consult the online document [How to Get Utility Data into Portfolio Manager](#).
- ESPM allows you to generate [standard](#) and [personalized](#) report templates.

5. Frequently Asked Questions

5.1 About ENERGY STAR Portfolio Manager

What is the ENERGY STAR Portfolio Manager?

ENERGY STAR Portfolio Manager (ESPM) is an interactive management tool created by the U.S. Environmental Protection Agency (EPA) that allows you to monitor and evaluate water and energy consumption throughout your entire portfolio of buildings in a secure online environment. The Canadian adaptation was launched by Natural Resources Canada in 2013 and includes many features to facilitate the Canadian user's experience (see below for more details).

Use of the ESPM is absolutely free of charge. It provides weather-normalized energy use intensity values, measurement of greenhouse gas emissions, report-generating functions that help you follow trends over time, and energy performance ratings from 1 to 100 for eligible building types.

For more information, consult [An Overview of Portfolio Manager](#).

What is comparative analysis benchmarking and why is it important?

Comparative energy consumption analysis is the process of recording and monitoring the energy consumption of a building, and comparing the results with those of other buildings similar in terms of size and function. Comparative analysis allows you to measure the energy performance of your building as compared to other buildings in your sector, or to a national average or an ensemble of exemplary practices. You can also compare your building's current performance with its past performance, or with other buildings in your portfolio.

The comparative energy analysis allows users to make enlightened decisions about how energy is consumed.

- You will find out if the energy performance of your building is improving or getting worse.
- It will be much easier for you to make improvements by measuring in real time the quantity of energy used by your building.
- After making improvements, very soon you will be able to identify what works well and what aspects could be improved.

ENERGY STAR Portfolio Manager in Canada

Launched in 2013, the Natural Resources of Canada adaptation of Portfolio Manager includes the following functionalities:

- Canadian site energy and source energy
- Greenhouse gas emission factors in Canada
- ENERGY STAR Canada scores from 1 to 100 for several building types

- Canadian national EUI median (site energy and source energy) for more than 80 types of buildings, including buildings without a rating
- Upgrades of Canadian weather data (more than 150 meteorological stations across Canada), with the weather station nearest your building automatically selected based on the building's postal code
- Metric units
- Bilingual user interface
- [Web services](#) for Canadian service providers
- The EPA [Target Finder](#) tool

5.2 Performance Evaluation

What performance measures are taken into account in the BEC?

The BEC focuses on two measures of performance evaluation: weather-normalized site energy use intensity (EUI) and the quantity of GHG emitted.

How are greenhouse gas emissions calculated for the BEC?

Total GHG emissions in the ESPM tool are calculated as follows:

$$\text{Emissions} = \text{emission factors} \times \text{Site energy}$$

For natural gas and electricity, Portfolio Manager uses emission factors specific to Canada that are regionalized to take into account variations across the country.

Figure 6 – Indirect GHG Emissions Factors for Electricity in Canada

Province	CO _{2eq} Emissions (kg/MBtu)
Alberta	257.91
British-Columbia	4.89
Manitoba	1.03
New Brunswick	84.11
Newfoundland and Labrador	9.09
Northwest Territories	87.92
Nova Scotia	213.95
Nunavut	219.81
Ontario	11.72
Prince Edward Island	84.11
Quebec	0.47
Saskatchewan	263.77
Yukon	12.02
National Average	43.96

For more information, consult:

- https://portfoliomanager.energystar.gov/pdf/reference/Emissions_eng_CA.pdf

Does the BEC use the ENERGY STAR rating to evaluate performance?

No. ENERGY STAR scores and source energy are not used in the BEC. What is evaluated is site energy, especially weather-normalized site energy use intensity (EUI), as well as the quantity of GHG emitted.

My ENERGY STAR score is low. Is that an indication of my building's energy performance?

The ENERGY STAR score is based on data gathered in national surveys. It takes into account key variables that influence the energy performance of a building, including weather conditions, operating hours and the size of the building. The score calculation is based on *source energy*, not on *site energy*. Using average electricity production in Canada as a base, Portfolio Manager applies a penalty of 205% to electricity used to convert *site energy* into *source energy*, which penalizes buildings heated by hydroelectricity, as is the case in Quebec.

The Quebec Energy Transition Guide explains the difference between *site energy*, *source energy* and the ENERGY STAR *performance rating*, and why using that rating should be avoided (p.27 point c).

For more information, consult:

- <http://www.transitionenergetique.gouv.qc.ca/fileadmin/medias/pdf/batiment/TEQ-04-2018-Guide-implanter-gestion-energie-immeubles.pdf> (available in french only)

5.3 Energy Use Intensity

I entered my data, so why can't I get a weather normalized EUI rating?

Confirm that the 12 consecutive months of data on energy consumption were correctly entered (no overlapping dates). Entering averages (data representing a period of more than one month) will not generate a weather normalized EUI.

In the ESPM portal, every time that a measure is "Not available" you can click on the "Not available" terms for a detailed explanation. These messages contain links that can help you resolve the problem quickly. It is also possible that no solution will be offered, since a particular metric simply might not exist for your type of property. In that case, alternatives will be proposed.

Data Quality Checker – The ESPM Data Quality Checker in the "Summary" tab allows you to filter a specific time period to detect any errors it might contain. The tool analyzes incomplete data and verifies metrics such as the *site EUI*, the number of workers in relation to your gross floor area and

hours of operation per week to see whether any elements are inaccessible for your type of property.

How can I obtain a weather normalized EUI if I don't know the energy consumption of my tenant(s)?

In certain building categories, the building manager cannot have full access to the energy consumption figures for rented premises. Although preferable, they are not necessary to obtain a weather normalized EUI for the purposes of the BEC.

You can submit incomplete energy consumption data if you do not have access to all the information. Indicate which sectors you are providing energy consumption data for, and enter the appropriate building floor area. Such buildings can still obtain a weather-normalized site EUI so long as you have provided data for 12 consecutive months.

5.4 Other Questions

What steps are required if I want to share another building?

Once your account is connected to the BEC account ([step 3.1](#)), you don't have to repeat that step. You can share as many buildings in your account as you want by repeating [step 3.2](#) for each building.

How to enter my weekly operating hours?

Weekly hours of operation will vary depending on the property:

Office, financial centre, warehouse or distribution centre: The weekly operating hours are the total number of hours per week when the property is occupied by the majority of employees. For example, if most employees work in your building from 8 a.m. to 6 p.m. from Monday to Friday, weekly operating hours will be 50 hours (10 hours x 5 days per week).

Do NOT take the following hours into account:

When the property is occupied only by maintenance, security or cleaning staff or other support staff.

The time spent starting up or closing down heating, ventilation or air conditioning equipment.

Properties open to the public (retail store, medical centre, bank branch, courthouse, health club): Weekly hours of operation are the hours that the building is open to the public.

What is the occupancy rate?

The occupancy rate is the percentage of gross floor area that is occupied and operational. For example, if you have a 10-storey office building where on average 9 of the 10 floors are fully rented and occupied, the occupancy rate is 90%. If there are people who work on all floors and working

spaces in your building, your occupancy rate is 100%. You do not need to count work stations to determine the occupancy rate.

What if my occupancy rate changes?

There is only one occupancy rate for each property. You enter the occupancy rate when you create the property. If your average occupancy rate for the current year changes in relation to the reference year, enter the change in the "Details" tab and update the hours of operation if they have also changed.

If the occupancy rate fluctuates during the course of the year, calculate the average occupancy rate over a 12-month period. For example, if the property was 50% occupied for the first half of the year, and then 100% occupied for the second half of the year, the occupancy rate for the year is 75%.

Why do you advise against creating many space/use types?

Although it seems logical and methodical to separately indicate each property use, it does not increase the accuracy of the results. Even if you indicate these types of spaces separately, the ESPM will regroup the data again in the "office building" category before calculating your metrics. Indicating a single type of space will simplify things for your building and will facilitate the correction of errors.

What spaces are not to be included in the energy consumption data?

Here are a few examples of sources of energy consumption that it might be wise to exclude (provided that they are under-measured) for your property:

- Cell phone towers;
- parking garages;
- electric vehicle charging stations;
- heated outdoor pools (N.B. indoor pools are not to be excluded);
- display panels or projection screens in a building (or in the parking garage **when the panel is not linked to property use**). A panel displaying the name of the firm or anything that deals with the firm's activities **MUST** be included in property use.

You can exclude a type of property use (or space) in the building if it meets the following 4 conditions:

- The type of use represents less than 10% of the gross floor area of the building;
- The type of use is under-measured, such that the floor area and energy consumption can be excluded;
- Energy consumption habits of this type of use are substantially different from those in the rest of the building (e.g. a ground floor restaurant in an office building);
- The building contains a data centre that meets the ESPM definition (see following question), and thus the energy consumed by the data centre should not be included.

What is the ESPM definition of a data centre and what do I do if there is one in my building?

The term "data centre" designates buildings specifically designed and equipped to satisfy the needs of high density computing equipment, such as server racks used for data storage and processing. Generally speaking, such facilities have dedicated power and cooling systems. Data centres may include traditional enterprise services, high performance computing, Internet facilities and/or hosting facilities.

Data centres are often free-standing, mission-critical computing centres. When a data centre is located inside a large building, it usually has its own power and cooling systems with a constant power load of 75 kW or more. The data centre is intended for sophisticated computing and server functions, and should not be used for server closets or computer training areas.

The energy consumed specifically to meet the needs of a data centre must not be excluded from the total data entered in ESPM. When you input your IT energy use, make sure not to double-count your data centre energy consumption. The "IT Energy Consumption" (the field that pops up when you create a "Data Centre" space) can be considered as similar to other operational characteristics in the office model, such as "Number of Workers" or "Operating Hours per Week".

When you create a property use space for data centres, the system will ask for the gross floor area, but that does not mean the floor area for the data centre. Once again, enter the gross floor area for the entire building.

You must be able to measure, monitor and indicate the specific quantity of energy delivered directly to IT equipment (servers, storage devices, etc.). Measurements must be obtained at the output of the Uninterruptable Power Supply (UPS) or, in some cases, the input of the Power Distribution Unit (PDU). (<https://portfoliomanager.zendesk.com/hc/en-us/articles/211026638-My-data-center-is-already-sub-metered-Can-I-use-this-for-IT-Energy->).

When you configure the property, click on the box indicating that your building has a data centre. Then, when installing meters, include an IT energy meter to measure energy consumption.

Should I include energy consumption in the parking garage?

Whether a fully or partially enclosed parking garage or an open air lot, if the parking area is part of the building it is not included in the gross floor area, for the ESPM tool is focused on energy consumption inside the building. For example, if you have office an building with a floor area of 100,000 square feet, with 20,000 square feet of parking space, you must enter a gross floor area of 100,000 square feet. Consequently, you must not include the energy consumption linked to the parking space (if it is indicated on the meter).

Standalone Parking Garages: If you report a standalone parking garage, EPA recommends that you select the "Other" building type when creating the building. Do not check off "My building's energy use includes parking areas". Simply enter the total area of the garage (i.e. including the parking) as the area of the building. That will prevent any error messages popping up.

You have two options for a property with a parking area:

1. Sub-meter your parking area and exclude its energy consumption and its gross floor area (recommended option).
2. Include its energy consumption and its gross floor area.

How do I take into account vacant space in my building? (for certain property types only)

Note: Only offices, medical offices, banks, courthouses and financial centres are obliged to report energy use for vacant property.

If your vacant space constitutes 10% or more of the gross floor area of the building (for more than 12 months), you must enter it as separate property use, as follows:

- Property Type = Property Type it would be if occupied (office, medical office, etc.)
- Weekly Operating Hours = 0
- Workers on Main Shift = 0
- Number of Computers = 0
- Percent Heated and Percent Cooled = report air conditioning as it occurs in the vacant space

For more information, consult:

<https://portfoliomanager.zendesk.com/hc/en-us/articles/211026358-How-do-I-account-for-my-vacant-space-in-my-Office-Bank-Financial-Center-Courthouse-or-Medical-Office->

What do I do if my property is a mixed-use building?

You can enter your property under "Other" (the simplest option). You will get the same parameters for your mixed-use property that you would have had if you entered each property type separately.

Consult the following link for more information:

<https://portfoliomanager.zendesk.com/hc/en-us/articles/223486128-How-do-I-enter-a-mixed-use-property->

What if I have other questions?

Consult Natural Resources Canada and its FAQ section on comparative analysis:

<https://www.nrcan.gc.ca/energy/efficiency/buildings/energy-benchmarking/faq/3787>

Consult the ENERGY STAR Portfolio Manager glossary for useful definitions:

<https://portfoliomanager.energystar.gov/pm/glossary?lang=en>

Consult the Portfolio Manager Quick Start Guide:

<https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/oeefiles/pdf/publications/commercial/QuickStart-EN-May2014.pdf>

Contact BEC for any additional questions!

APPENDIX 1 - BUILDING TYPES

The competition is open to all owners and managers of commercial and institutional buildings in Quebec. The major building categories recognized for the BEC are as follows:

- **Office Buildings**

- Office
- Medical Office
- Veterinary Office

- **Retail**

- Mall
- Retail Store
- Automobile Dealership
- Convenience Store
- Wholesale Club/Supercentre
- Supermarket/Grocery Store

- **Education**

- Adult Education
- College/University
- K-12 School
- Pre-School/Daycare
- Vocational School
- Other

- **Healthcare**

- Ambulatory Surgical Center
- Hospital
- Medical Office
- Outpatient Rehabilitation/Physical Therapy
- Residential Care Facility
- Senior Care Community
- Urgent Care/Clinic/Other Outpatient

- **Mixed Use**

- **Multi-residential Buildings**

This definition applies only to multifamily housing. Buildings that meet the definition for a Hotel, Residence Hall/Dormitory Senior Care Community, Single Family Home, or other type of lodging or residential facility must use the Universal Module (definitions from Energy Star Portfolio Manager).

- **Universal Buildings***

[Click here](#) for building definitions.

* The "Universal Building" category covers a broad range of establishments and building types. Any buildings that do not fit into the abovementioned categories will be listed by the BEC in the "Universal Building" category.

Universal Buildings

- **Other**
- **Food Sales & Services**
 - Restaurant/Bar
- **Lodging /Residences**
 - Barrack
 - Hotel
 - Single Family Homes
 - Residence Hall/Dormitory
 - Senior Care Community
 - Other
- **Banking/Financial Services**
 - Financial Office
 - Bank branch
- **Technology /Science**
 - Data Center
 - Laboratory
 - Other
- **Entertainment/Public Assembly**
 - Convention Center
 - Performing Arts
 - Movie Theater
 - Recreation
 - Museum
 - Social/Meeting Hall
 - Stadium
 - Other
- **Warehouse/Storage**
 - Self-Storage facility
 - Warehouse/Distribution center
- **Religious Worship**
 - Worship Facility

- **Utility**
 - Energy/Power Station
 - Wastewater Treatment Plant
 - Drinking Water Treatment & Distribution
- **Public Services**
 - Library
 - Fire Station
 - Mailing Center/Post Office
 - Courthouse
 - Police Station
 - Social /Meeting Hall
 - Transportation terminal/Station
- **Services**
 - Data center
 - Repair Services (Vehicule, Shoe, Locksmith, etc.)
 - Personal Services (Health/Beauty, Dry Cleaning, etc.)
 - Other
- **Parking**
 - Parking
- **Manufacturing /Industrial**
 - Manufacturing Industrial Plant