





# **Best Practices and Helpful Hints for Utilities Providing Data**

## **Overview**

Under Ontario Regulation 506/18- Reporting of Energy Consumption and Water Use (the Regulation) owners of buildings that are 50,000 square feet or larger are required to report their building's water and energy use once a year to the Ministry of Energy through the Energy and Water Reporting and Benchmarking (EWRB) initiative. The Regulation applies to commercial, multi-unit residential and some industrial buildings.

This document was developed based on best benchmarking practices including input from some Ontario utilities. The purpose of this document is to share best practices and frequently asked questions with utilities to support compliance with annual EWRB requirements.

## **Disclaimer**

While this guide was written to provide information on best practices and helpful hints for EWRB, readers should not take any of the information as legal advice. All requirements relating to EWRB data reporting in the Regulation can be found on Ontario's e- Laws website.

Note that references to the Regulation are made throughout this guide, and readers are recommended to refer to the Regulation for the exact legal language when reading this guide.





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# **Roles and Responsibilities of Utilities**

In accordance with the Regulation, when requested, utilities are required to provide eligible building owners aggregated monthly data for electricity, water and/or natural gas use as available through existing metering infrastructure, for each calendar year. If a utility does not collect consumption or usage information by month through existing metering infrastructure, they are required to provide the information by the shortest aggregation period available.

Utilities must make this information available to the current building owner, even if they did not own the building for the period when the energy or water was consumed. Utilities cannot provide this information to third parties, such as property management companies or energy consultants, without authorization from the property owner.

# **Roles and Responsibilities of Building Owners**

Building owners are required to obtain and submit all necessary information to meet reporting requirements and deadlines. The report must cover details about the previous calendar year. For example, a report covering water and energy usage from January to December 2017 would be due by July 1, 2018. Building owners must report in Portfolio Manager. The Portfolio Manager software is an online benchmarking software licensed to Natural Resources Canada and is widely used in North America for energy benchmarking.

# **Data Privacy**

Utilities should confirm that they are providing the data to the authorized person (building owner/owner representative) in order to protect their tenants' data privacy.

- EWRB requires utilities to provide aggregated information to property owners.
  Generally, utility regulations allow for utilities to disclose information when they are
  legally required. In some cases, utilities may consider obtaining confirmation
  (authorization) from tenants before their usage data is released to the property owners.
  For example, where there is a single tenant in a building, a utility may decide
  tenant authorization is required.
- Utilities should explain the confirmation (authorization) process clearly on the utility's website and make necessary tenant authorization forms downloadable. This will enable requestors to initiate the necessary authorizations well ahead of time which in turn will





allow the building owners/owner representatives to meet their annual regulatory reporting timeline of July 1.

# **Aggregated Building Data**

The building owner must be provided with total consumption, by month, for the year being reported if it is available. If a utility does not collect consumption or usage data on a monthly basis, the utility should consider delivering the data by the next shortest period possible. Data should be provided on a best available basis to ensure it represents energy or water use accurately.

Where a building has multiple meters that are not all read on the same date, the utility is to prorate the consumption data for each meter before the data is aggregated.

# **Typical Reporting Scenarios**

## 1. Buildings with a Single Meter

If a building has only one meter, the building owner will report consumption based on that meter.

#### **Individual Meter Data**

Building owners may request consumption reported by individual meters if it is available and they own all the meters. Portfolio Manager, the tool used for reporting, will automatically prorate the information from the individual meters and combine the data to create a whole building report.

An Excel spreadsheet is available in Portfolio Manager for download by building owners reporting consumption from multiple meters.

## 2. Buildings with Multiple Meters





If more than one meter is installed on the building, then the building owner may request aggregated building data (i.e., combined data for all meters on the building or property). In cases where accounts are held by tenants, building owners are entitled to receive aggregated consumption information for all meters at their buildings.

#### 3. Properties with Multiple Buildings

Building owners with multiple buildings on one property have the option to report at the building level or at the property level.

If there is more than one building on a property that is required to report, and the owner decides to report at the building level, they will need to be assigned an EWRB ID for each building on the property that must report. EWRB IDs are assigned by the Ministry of Energy. In order to receive EWRB IDs for additional buildings on the same property, owners must provide the Ministry of Energy information on the <u>size</u> and <u>use</u> of each building that is <u>50,000</u> square feet or larger.

Utilities are required to provide aggregated information as is available through the existing metering infrastructure. If the utility provides the building owner aggregated data for all buildings on the property, the building owner must decide how to allocate total usage between their buildings.

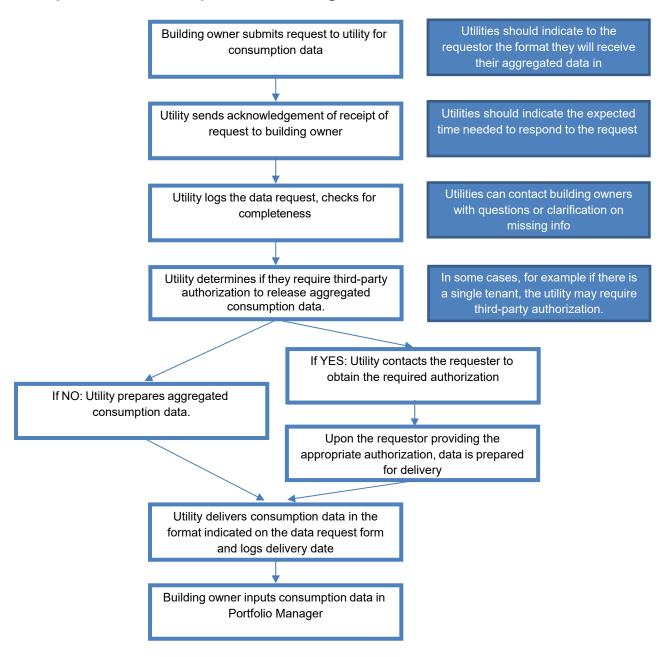
## **Approaches to Proration Can Include the Following:**

- To get the consumption factor, the utility can divide the usage number by the number of the days in the consumption period. Then, multiply the factor by the number of days in the consumption period that fell in each month (e.g. for a consumption period that runs from January 11 to February 10, the consumption factor would be multiplied by 21 days for January and 10 days for February).
- Simple allocation is the sum of usage from all meters read in a given month, regardless
  of the day in the month that each meter was read. This allocates usage as if it had all
  occurred in that month (i.e., regardless of whether the meter reading period includes
  some consumption from the preceding month). Simple allocation should be considered
  as an interim measure pending implementation of more accurate automated systems.





## Sample Process: Steps in Delivering Data







# **EWRB Data Request Templates**

#### **Product**

 Several utilities have developed data request templates for use by building owners. The templates streamline requests for EWRB data by ensuring key information required for authorized sharing of data is completed.

## **Guiding Principles for Developing EWRB Data Request Template**

- Various Customer Information System capabilities need to be considered in developing a data request template.
- Some utilities may want to consider building in automated features in subsequent years (i.e., interactive templates that prepopulate information based on request for previous years' data).
- To the extent possible, utilities should all use the same standard format for mandatory designation (e.g., \* designates mandatory).

## **Format for EWRB Data Request Template**

## **Building/Property Information:**

Field	Notes
EWRB ID	Provided by the Ministry of Energy
Compliance Year for Data Request	Year for which data is being requested (e.g., 2018 consumption data)
First Mandatory Compliance Year	Building owner's first-ever reporting deadline (e.g., first-ever report filed in 2019)
Business Operating Name	e.g., Yorkdale Mall (if applicable)





Property Gross Square Footage	Gross floor area including common elements and excluding parking area
Property / Locational (Service) Postal Code	Some interactive forms may prepopulate the address based on postal code
Property / Locational (Service) Address(es)	May include multiple fields or drop-down menus to gather multiple street addresses associated with a property (e.g. shops at Don Mills property has multiple street addresses)
Utility Account / Meter Number	May be requested to validate the requestor's association with the property
Multiple Street Addresses Associated with Property?	Provide multiple street addresses associated with property
Multiple Buildings on One Street Address?	Yes / No
Is This a Multi Residential Property?	Yes / No
MPAC Property Code	Provide number (Ministry of Energy Only)
MPAC Assessment Roll Number	Provide number (Ministry of Energy only)





## **Contact Information for Data Requestor:**

Field	Notes
Full Name of Data Requestor	Person who is to receive the data
Full Legal Corporate Name	Data Requestor's company name
Mailing Address, Postal Code	Where to send EWRB data
Email Address	In case follow up is needed
Phone Number	In case follow up is needed
Indicate Relationship to Building Owner	e.g., Building Owner, OR Authorized Agent OR Management Company

## Contact Information for Building/Property Owner:

Field	Notes	
Full Name of Building/Property Owner	Ministry of Energy needs owner information (if different from contact information, above)	
Full Legal Corporate Name	Building owner's company name	
Mailing Address, Postal Code	For legal owner of building	
Email Address	For legal owner of building	
Phone Number	For legal owner of building	





#### **Terms and Conditions and Authorizations**

- Each utility will draft their own terms and conditions / disclaimers for the data request.
- Disclaimer covers areas that include, but may not be limited to:
  - o Confirmation of legal authority to request consumption data;
  - Explicit authorization from the owner of the consumption data for the release of their data; and
  - Information provided will not be used for any purpose other than to comply with regulated reporting requirement.

#### Other Optional Information

- Fields that are optional should be clearly marked as "non-mandatory" and building owners should be made aware that there is no obligation for them to provide nonmandatory information.
- Each utility will determine optional fields to include on their data request form.
- Example of an optional field that is linked to the EWRB initiative:
  - Utility requests data requestor's consent to share their contact information with the utility's conservation team, so that they may follow up with the building owner to help identify conservation opportunities.

# **Portfolio Manager Format for Reporting**

Building owners are required to report consumption data for the entire reporting year using Portfolio Manager. In cases where billing periods do not align with the calendar year, consumption data for the month prior (December) and/or the month after (January) the year in question will be required so that the building owner can make a complete report. Portfolio Manager will prorate the consumption data to reflect the reporting year.

## Data Fields Required for Input to Portfolio Manager

For each building, the building owner will need to input the following information into Portfolio Manager:

- 1. Meter number(s)
- 2. Meter read start date





- 3. Meter read end date
- 4. Total usage (non-loss adjusted consumption)
- 5. Estimated read (Yes/No drop-down yes means estimated)

# **Guiding Principles for EWRB Data Delivery**

- 1. Minimize the effort required to report consumption data for all stakeholders, while maintaining appropriate privacy and authorization controls.
- 2. Make it easy for building owners to find their utility and the contact person or department at the utility who can deliver their building's consumption data.
- 3. Ensure capacity at the utility to handle EWRB data requests by:
  - Making sure utility timelines with respect to EWRB requests are clearly understood and communicated;
  - Clearly communicating exceptions to the expected timelines to the requestor; and
  - Ensuring aggregated consumption delivered for EWRB purposes align with the Portfolio Manager format with the possibility of including multiple formats such as, excel, xml, csv etc.

# **Examples of Best Practices**

## **Client Support**

- Consider approaches which simplify the process for all stakeholders such as:
  - Establishing a dedicated phone number and a specific address (e.g. <u>ewrb@utilityname.com</u>);
  - Making utility agents aware of the EWRB reporting and information requirements;
  - Presenting key information prominently on websites; and
  - Streamlining and standardizing forms and outputs across utilities.
- Consider promoting the practice of hosting a landing page on EWRB with links to all local energy and water utility webpages.





#### **Data Requests**

- Strive for a "One Stop" approach that requires building owners to submit a full data request only once (e.g., utility keeps information on file and future requests require only key information to confirm contact or utility prepares data in advance based on request in past year, etc.).
- Consider cross-referencing data requests with a list of EWRB IDs issued within the utility's jurisdiction, to help track volumes and validate requests that are for EWRB compliance.
- If the utility wishes to gather information that is not mandatory for EWRB reporting (e.g., space and water heating, etc.), consider leaving such requests off the EWRB Data Request form to reduce burden on the requestor, and instead add a field asking permission for a utility representative to contact the requestor.
- Consider implementing whole-building data access solutions that enable the utility to identify and aggregate data for all individual meters at a specific location (e.g., a building address), as opposed to asking a building owner to "sign-off" on the completeness of their building's aggregated data.

## **Data Delivery**

- If a utility does not collect consumption or usage data on a monthly basis, consider delivering the data by the next shortest period possible in the circumstances.
- Consider implementing web services that enable the billing data system to connect to a customer's Portfolio Manager Account and send energy usage data directly into the record on an established schedule.
- Consider mapping meters by using geographic information system (GIS) data to match meters to the GIS coordinates for a building.
- Consider aligning the output format with the Portfolio Manager input format. Ensure full
  calendar year consumption is made available to the requestor, clearly indicating what
  type of consumption information is provided (for example billed consumption, prorated
  consumption etc.).
- Ensure the consumption data provided is validated and accurate. Consider developing a data accuracy validation checklist.





 Consider providing information in formats that are easy to compile and transfer for the building owners. For example, a PDF format or a complex excel spreadsheet will be difficult for the building owner to handle.

#### **Outreach**

- Consider working with municipal partners to develop a single data access solution for multiple utilities located in the same geographic area.
- Review and discuss the appropriateness and applicability of experiences in other jurisdictions that have already implemented building reporting requirements.
- Consider approaches to leverage systems or processes created by other utilities in Ontario for EWRB compliance. Consider sharing successful approaches with the Ministry of Energy and other utilities to enable improvements to the EWRB processes overall.

# **Frequently Asked Questions**

## 1. Who can request data for EWRB compliance?

A. Building owners of commercial, some industrial, multi-unit residential and other building types that are required to report. Currently buildings that are 50,000 square feet or larger are required to report. Owners may delegate this task to a representative (e.g., property manager) or other contact; however, utilities will require verification of this authorization prior to releasing data to the agent. If a building has multiple owners, then the owners are jointly responsible for meeting the requirements in the Regulation. Condominium corporations must report and submit data on behalf of condominium buildings.

## 2. Is there a deadline for utilities to provide the data?

- A. Utilities are required to provide this information within a reasonable time after the request is made. The reporting deadline for building owners is July 1 annually. Building owners may request their data from utilities at any time. Some utilities may proactively reach out to previous reporters to remind them to request for their data in timely manner.
- 3. What documentation must an agent for the building owner provide when making a request for building data?





- A. Utilities need to develop their own processes to determine that an account holder's agent has the authority to request information. Utilities with experience delivering data in the first EWRB compliance period have created the following products for utilities:
  - 1. EWRB Data Request Form standardization matrix; and
  - 2. Best Practices for creating EWRB data request templates and delivering data.

To fulfil an EWRB data request, utilities typically ask the building owner or agents for relevant information, such as:

- Building owner, requestor (agent for building owner) and/or key contact
- Authorization from the consumer to release consumption information to a building owner or their agent
- Building / Property Information:
  - Owner's name
  - Service address
  - o Does the property have multiple buildings at one street address?
  - o Does the building have multiple street addresses?
- Property Details:
  - EWRB ID
  - Property Code
  - o Compliance deadline, as set out in O.Reg. 506/18.
- 4. If one property has multiple buildings (e.g., a shopping mall) with the same property owner, do we provide the consumption information for each separate building located at the same property? Or would we combine the total consumption for all buildings?
  - A. Where multiple buildings are located on the same property, the metering configuration will determine the approach to how the building owner reports their consumption data in Portfolio Manager.

Where each building is metered separately and the property owner reports each





building separately for EWRB, the property owner may request consumption data for each building or ask that the utility aggregate the consumption data.

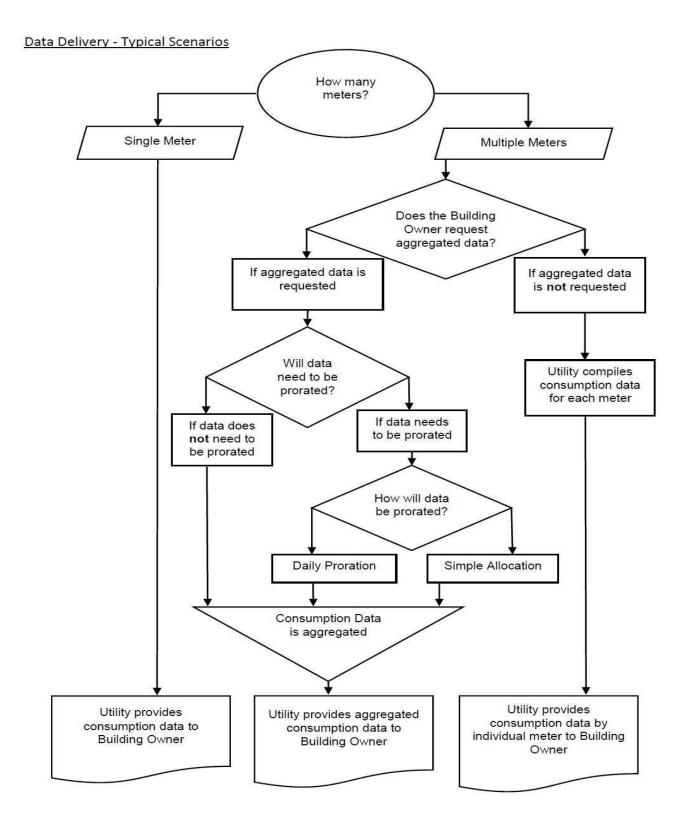
If consumption data is collected for all buildings through a single meter, then the building owner can:

- Either report the single consumption value for all buildings on the property. Please see typical scenarios for data delivery in the chart that follows.
- Or, use some mechanisms to disaggregate data and report prorated consumption for each building if they report them as different EWRB buildings

(Scenario flow chart on next page)











- 5. Our utility does not read meters based on the calendar month (e.g., Jan 1-31). Is it acceptable to provide consumption data based on actual meter reading dates? Does our utility need to prorate this information?
  - A. Yes. It is acceptable for a utility to provide consumption data based on meter read dates, as Portfolio Manager is capable of prorating consumption data to align with calendar months. Where single meters for a property are involved, consumption for the last month of the previous year and the first month of the following year need to be provided to the building owner. If the requestor owns the consumption for all the meters, the utility can provide individual meter data with different meter reading dates and the requestor will be able to load it into Portfolio Manager
- 6. Are utilities required to provide dollar amounts as well as consumption data?
  - A. Utilities are not required to provide dollar amounts.
- 7. Is the utility expected to provide electricity consumption that is uplifted?
  - A. Utilities should provide consumption as kWh used, with no line loss adjustment applied (i.e., non-loss adjusted data). Note that in Portfolio Manager, the term "Electricity Use Grid Purchase" as a data element is meant to differentiate between electricity supplied by a utility, and electricity generated onsite.
- 8. The unit of measure listed in O.Reg.506/18 is in BTUs for gas or gallons for water. All our data is in cubic meters (m3). Will the customer convert this data?
  - A. Portfolio Manager has drop-down menus for reporting consumption. Available values for reporting consumption data include Conventional EPA Units and Metric Units.
    - For natural gas, reporting values include: ccf, cf, Cubic meters, GJ, kBtu, kcf, MBtu, MCF and therms;
    - For electricity, reporting values include: GJ, kBtu, kWh, MBtu, MWh; and





 For water, reporting values include: ccf, cf, cGal (UK), cGal (US), Cubic meters, Gallons (UK), Gallons (US), kcf, Kcm, KGal (UK), KGal (US), Liters, MCF, MGal (UK), MGal (US).

# **Important Links and Contacts**

Questions: Call 1-844-274-0689 or email <a href="mailto:EWRBSupport@ontario.ca">EWRBSupport@ontario.ca</a>

Regulation: O. Reg. 506/18: Reporting of Energy Consumption and Water Use

**Guidelines:** Information on the Energy and Water Reporting and Benchmarking (EWRB)

initiative and the regulation

# **Other Helpful Resources**

Energy Data Access: Blueprint for Action:

https://betterbuildingsinitiative.energy.gov/accelerators/energy-data

Ministry of Energyhttps://www.ontario.ca/page/guide-energy-and-

water-reporting CAGBC overview of EWRB for Building Owners:

https://www.cagbctoronto.org/files/CaGBC Ontario%20Benchmarking.%20FINAL Update.pdf

Portfolio Manager Training:

https://www.energystar.gov/buildings/training