

O. REG. 397/11
Overview of Reporting Requirements under the
Amended Regulation

June 25, 2015

INTRODUCTION

- Ontario Regulation 397/11 was established to help public agencies better understand how and where they use energy and to develop conservation plans to guide energy savings.
- There are a number of reasons to report energy use and prepare conservation plans:
 - Allows organizations to better manage their energy use by knowing where energy is used in their operations.
 - Allows organizations to compare their facilities' energy use to similar facilities across the province
 - Supports Ontario's Long-Term Energy Plan target of 30 TWh by 2032.
 - Supports Ontario's Conservation First policy, where conservation is the first resource considered before building expensive new generation and transmission facilities, wherever cost-effective.

BPS DATA IS PUBLICLY AVAILABLE

- The Ministry of Energy has posted the raw and normalized energy consumption and GHG emissions data on the province's Open Data website for the past two reporting cycles and will continue to post this data to allow BPS organizations and the public to track energy consumption year-over-year.
- The “Energy use and greenhouse gas emissions for the Broader Public Sector” page on Open Data continues to be one of the most visited data sets on the website.
- The reported energy consumption and GHG emissions data for the past two BPS reporting cycles is also highlighted via the Province's recently launched Energy Report, which provides an up-to-date snapshot of the province's energy sector.

REGULATORY AMENDMENTS IN EFFECT FOR THE 2015 REPORTING CYCLE

The Government recently amended O. Reg. 397/11 in response to feedback from BPS organizations. These amendments streamline the reporting process and improve data quality.

Starting in the 2015 reporting year:

- In multi-use buildings the total energy consumption will be allocated to the primary operation of the building; the primary use being the one that occupies the most indoor floor area.
- Municipalities and municipal service boards are no longer required to report on water/sewage pumps. However, they can continue to do so voluntarily. Municipalities and municipal services boards continue to be required to report on water and sewage treatment.

WHO MUST REPORT?

- Municipalities
- Municipal Service Boards (water/sewage treatment operations)
- Colleges and Universities
- Hospitals
- School Boards

WHEN ARE REPORTS DUE?

- Reporting requirements over the next 5 years are:

Deadline	Template Reporting Requirements	CDM Plan Reporting Requirements
July 1, 2015	Report on 2013 calendar year	None
July 1, 2016	Report on 2014 calendar year	None
July 1, 2017	Report on 2015 calendar year	None
July 1, 2018	Report on 2016 calendar year	None
July 1, 2019	Report on 2017 calendar year	Post updated CDM plan

WHO PREPARES THE REPORT?

- An individual with knowledge of your organization's building operations and energy use, typically including:
 - Energy or Facilities Manager; Environmental or Sustainability Coordinator; Administrative Officer; Director of Maintenance, Engineering, or Physical Plant; or Director of Physical Resources.
- It is recommended that approval of the report is sought from most senior person responsible for energy procurement or facilities in your organization.

HOW TO REPORT?

Organizations must report in two ways:

1. **SUBMIT YOUR REPORT**

- ✓ Submit the required data to the Ministry of Energy using the online BPS portal

Link <https://extra.sse.gov.on.ca/sites/ENERGY-ECE>

2. **POST & PRINT**

- ✓ Post your annual energy consumption data on your organization's website and intranet site
- ✓ Print a copy of your annual energy consumption data available at your organization's head office
- ✓ Reports must be compliant with *Accessibility for Ontarians with Disabilities Act, 2005*

MINISTRY SUPPORT

- The Ministry of Energy has made the following resources available in the toolkit section of the BPS portal to help with reporting:
 - A step-by-step instructions guide on how to use the portal
 - A detailed guide for completing the report
 - Excel calculation tools to help with allocating energy by reporting year
 - Benchmarked energy consumption results from the 2011 and 2012 reporting years

DATA REQUIREMENTS

- Organizations reporting under the BPS Regulation must:
 - Report on buildings that are owned or leased;
 - Receive an energy invoice and pay for the building or facility's energy consumption; and
 - Be heated or cooled.
- If energy is purchased for multiple buildings, reporting is required for each building.
- Organizations must report on the Operation Types listed in the Regulation but may also include other operations using the “other” operation type option in the pull down menu.

DATA REQUIREMENTS (cont' d)

While each sector has a different set of operation types they must report on, all organizations are required to provide the following data:

- Operation Name
- Operation Type
- Address, City, Postal Code
- Total Floor Area
- Average # Hours Per Week of facility conditioning (i.e. heating, cooling, lighting)
- Amount of Each Type of Energy Purchased and Consumed (e.g. electricity, gas, etc.)

TYPES OF ENERGY TO REPORT

- Electricity
- Natural Gas
- Fuel Oil 1 & 2
- Fuel Oil 4 & 6
- Propane
- Wood (e.g. wood pellets)
- Coal
- District Heating/Cooling (if purchased and consumed)

OBTAINING ENERGY DATA

- Energy data for your organization may be obtained through:
 - Utility bills
 - Working with utility companies
 - External Databases

Natural gas meter reading information

Gas used in this period (m3) 321

PEF Value 0.99550 Adjusted m3 320

Electricity used this billing period

Meter J123456 / for billing period November 1, 2011 to December 3, 2011

Metered usage in kilowatt-hours (2,000 x 1) = 2,000 kWh

Adjusted usage in kilowatt-hours (2,000 x 1.092*) = 2,184 kWh

TEMPLATE FIELDS

Template Field	Instructions
Total Floor Area	<ul style="list-style-type: none"> • Can be reported in square feet or square meters • Multi operation buildings report the total indoor floor area for the entire building
Hours Per Week	<ul style="list-style-type: none"> • Average # Hours per Week should consider the hours before and after normal operating periods where the building is conditioned (light, heated or cooled) • For facilities with a schedule that varies, use the Average # Hours Per Week for the schedule most often followed

TEMPLATE FIELDS

Template Field	Instructions
Electricity	<ul style="list-style-type: none"> • Report metered usage/consumption in kWh • Do not report for electricity generated on site from renewables. Can include in CDM plans. • Report “green” electricity purchased from “green electricity retailers” with all other electricity
Natural Gas	<ul style="list-style-type: none"> • Report adjusted natural gas usage/consumption in cubic meters (m³) • Do not need to report natural gas used to run an emergency or back-up generator • Report for “green” natural gas purchased from renewable sources/green energy retailers with all other natural gas

TEMPLATE FIELDS

Template Field	Instructions
Oil, Propane, Coal and Wood	<ul style="list-style-type: none"> • Reporting of these fuels is required if they are used in facilities • Do not need to report fuel used to run an emergency or back-up generator or fuel used for the operation of vehicle • Wood includes wood pellets
District Energy	<ul style="list-style-type: none"> • Report for district heating and cooling that is purchased and consumed • Indicate “Yes” and Emission Factor if from renewable source • If natural gas is used to generate district energy, it will need to be allocated to the facilities served by the district energy system

TEMPLATE FIELDS

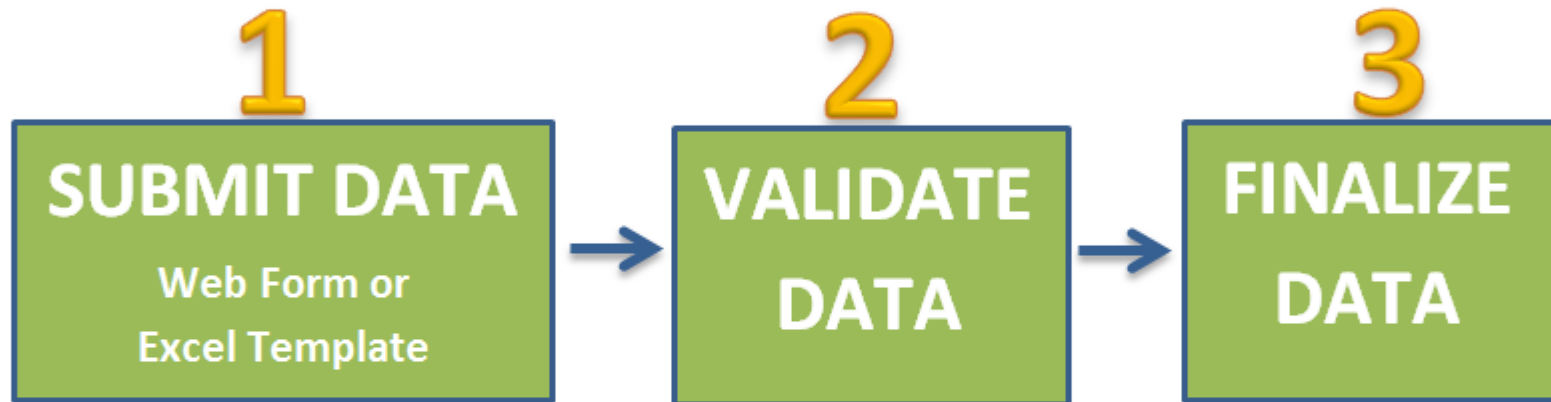
Template Field	Instructions
GHG Emissions	<ul style="list-style-type: none"> • GHG Emissions will automatically calculate the kilograms (kg) of equivalent carbon dioxide (CO₂) units of GHG emissions attributed to the energy purchased and consumed • It will be calculated automatically when the data is validated
Energy Intensity	<ul style="list-style-type: none"> • Energy Intensity will automatically calculate the equivalent kilowatt hours per square foot (ekWh/sqft) when the data is validated • Based on all energy types for each Operation Type relative to floor area • Allows efficiency comparisons within a public agency or benchmarking province-wide

DATA VALIDATION

- Electricity consumption above 5,000,000 kWh or below 100 kWh
- Total area below 1 m² (approx. 10 ft²) or above 23,225 m² (approx 250,000 ft²)
- Energy intensity less than 10 ekWh/ft² (108 ekWh/m²) or greater than 150 ekWh/ft² (1,615 ekWh/m²)
- Heating fuel sources above 5,000,000 ekWh or below 5,000 ekWh
- Water or sewage treatment or pumping with energy intensities below 25 kWh/ML or above 5,000 kWh/ML

REPORTING

In order to have successfully reported under O. Reg. 397/11, all BPS organizations must submit, validate and finalize their data.

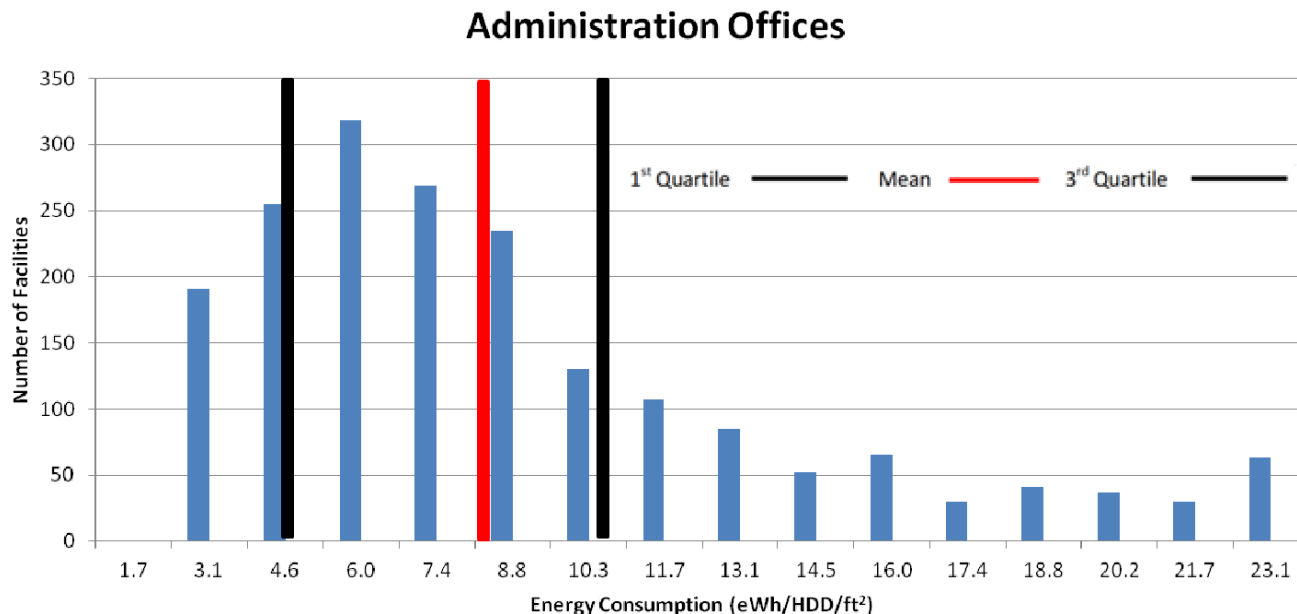


Normalization & Benchmarking

- Energy consumption needs to be adjusted to reflect weather conditions (e.g., using more during a cold winter).
- The Ministry of Energy normalizes by operation type for weather by dividing the annual energy (ekWh) use by the annual heating degree days.
 - Heating degree days is the difference between an indoor temperature (18c) and the outdoor temperature (-30c), which would be 48 HDD.
- The normalized energy use is then divided by the internal floor area of a building to determine its energy intensity.
- The resulting energy benchmark ekWh/HDD/sqft allows energy use in similar operations to be compared across the province.
- The Ministry provided BPS organizations with their normalized energy benchmarks along with graphs by operation type that allow those organizations to determine how their buildings compare to others and help set targets.

Year 1 Results – Administrative Offices

- Consultants benchmarking of administrative offices considered all administrative office space across all sectors.
- While a number of administrative offices are below the mean, the results need to be reviewed to determine where municipal administration offices are positioned on the table.



QUESTIONS?



CONTACT US

EMAIL: BPSsupport@ontario.ca