

## Laurentian University 2015 Report for Ontario Regulation 397/11 – Energy Conservation and Demand Management Plans

### Overview

This document provides a brief background and summary of data reported under Ontario Regulation 397/11 – Energy Conservation and Demand Management Plans for Laurentian University. Results are presented using the Ministry of Energy’s Energy Consumptions and GHG Emissions template (for the period of 2013), along with corresponding information for all pertinent facilities operated by Laurentian University.

### Background

On January 1<sup>st</sup>, 2012, the Energy Conservation and Demand Management Plans Regulation (O. Reg. 397/11) came into effect under the *Green Energy Act 2009*. Under this regulation, all broader public sector (BPS) organizations, including Universities, are required to:

By July 1, 2013 submit:

- Energy consumption and greenhouse gas (GHG) emissions for 2011
- Corresponding facility information

By July 1, 2014 submit:

- Updated energy consumption and greenhouse gas (GHG) emissions for 2012
- Updated corresponding facility information
- A five-year Energy Conservation and Demand Management (ECDM) Plan
- Detailed costs and estimated savings for all proposed Energy Conservation Measures
- Identification of benchmark facilities
- Previous energy conservation initiatives (optional)

By July 1, 2015 submit:

- Energy consumption and greenhouse gas (GHG) emissions for 2013
- Corresponding facility information

## Results

Table 1 below summarizes the facilities at Laurentian University along with the total indoor floor area. Future sub-metering at all facilities will not only help to track consumption, but also provide the ability to analyze energy efficiency at each building. This is discussed in the Laurentian University ECDM.

**Table 1:** Summary of Laurentian University Facilities

| Confirm consecutive 12-month period                       | 01-2013 to 12-2013                     |         |             |  |  |
|---|--|---------|-------------|--|--|
| Type of Public Agency (Sector):                           | Post-Secondary Educational Institution |         |             |  |  |
| Agency Sub-Sector   | University                             |         |             |  |  |
| Organization Name   | Laurentian University                  |         |             |  |  |
| Operation Name  | Address                                | City    | Postal Code | Total Floor Area of the Indoor (m <sup>2</sup> ) |  |
| RD Parker   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 13,022   |  |
| Dining Assembly   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 6,159  |  |
| Classroom Building  | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 3,739  |  |
| JN Desmarais Library                                      | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 11,831   |  |
| Science I   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 8,235  |  |
| Science II  | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 18,867   |  |
| Animal Care Facility                                      | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 512  |  |
| Arboretum   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 193  |  |
| Arts Building   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 5,391  |  |
| Alphonse Raymond  | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 9,726  |  |
| Daycare   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 890  |  |
| Education Building  | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 6,697  |  |
| Ben Avery (including Active Living Ctr)                   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 15,823   |  |
| NMR Lab   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 96   |  |
| Stadium   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 821  |  |
| Health Sciences Building                                  | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 2,868  |  |
| School of Medicine (NOSM)                                 | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 6,313  |  |
| Maintenance Building                                      | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 2,036  |  |
| Portables (8 - Parker, Sci 2, Ben Avery, Midwifery)       | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 569  |  |
| Living with Lakes   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 2,125  |  |
| Watershed Center  | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 518  |  |
| University College Residence                              | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 5,402  |  |
| Single Student Residence                                  | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 11,364   |  |
| Married Student Residence                                 | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 8,464  |  |
| West Court Residence                                      | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 9,229  |  |
| Thorneloe   | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 3,098  |  |
| University of Sudbury                                     | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 10,024   |  |
| Huntington  | 935 Ramsey Lake Rd                     | Sudbury | P3E 2C6     | 5,238  |  |
| <b>Laurentian University Main Campus Total</b>            |  |         |             | <b>169,250</b>                                   |  |
| Telegraph Building  | 85 Elm Street                          | Sudbury | P3C 1T5     | 436  |  |
| Workshop  | 51 Elgin Street                        | Sudbury | P3C 1T5     | 925  |  |
| <b>Laurentian University School of Architecture Total</b> |  |         |             | <b>1,361</b>                                     |  |

Below, Table 2 contains a summary of Laurentian University’s energy consumption, GHG emissions and energy intensity for January 2013 through December 2013. The energy intensity data is critical for benchmarking and identifying opportunities for future energy efficiency and conservation initiatives.

**Table2: Laurentian University 2013 Energy Consumption Summary**

| Confirm consecutive 12-month period          | 01-2013 to 12-2013                            |                  |                    |                              |
|--|---|------------------|--------------------|------------------------------|
| Type of Public Agency (Sector):              | Post-Secondary Educational Institution        |                  |                    |                              |
| Agency Sub-Sector                            | University                                    |                  |                    |                              |
| Organization Name                            | Laurentian University                         |                  |                    |                              |
| Operation Name                               | Energy Type and Amount Purchased and Consumed |                  | GHG Emissions (Kg) | Energy Intensity (ekWh/sqft) |
|  | Electricity (kWh)                             | Natural Gas (GJ) |                    |                              |
| Laurentian University Main Campus            | 22,071,104                                    | 131,046          | 8,153,338          | 30.27                        |
| Laurentian University School of Architecture | 193,261                                       | 1,097            | 68,899             | 33.99                        |

### Summary

The data contained in this report ensures compliance with O. Reg. 397/11. In addition, through measurement, reporting and planning, Laurentian University demonstrates its commitment to continuously improving campus sustainability.