

# Energy and Water Consumption and Greenhouse Gas Report 2014

July 2014

Ministry of Children and Youth Services  
Copies of this report can be obtained from  
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# **Energy and Water Consumption and Greenhouse Gas Report 2014**

## 1. PURPOSE

Through the Green Energy Act, 2009 (GEA), the Government of Ontario made commitments to conserve energy and use energy and water efficiently in conducting its affairs. The Government also committed to promote and expand energy conservation by all Ontarians and to encourage Ontarians to use energy efficiently.

Under the GEA, the Government is guided by a number of principles in constructing, acquiring, operating and managing facilities. Ministries responsible for the operation of Government owned facilities have a responsibility to demonstrate leadership in reducing energy/water consumption and the emission of greenhouse gasses, and to foster an overall culture of conservation. In addition to managing facilities in an environmentally sound manner, Ministries are also required to report annually on energy and water consumption and conservation.

This is the Ministry of Children and Youth Services (MCYS) Energy and Water Consumption and Greenhouse Gas report for facilities governed by the GEA (target class facilities) for 2014.

## 2. SCOPE

This report includes a portfolio overview, energy consumption data, energy conservation plans, and communications and awareness activities for the MCYS target class facilities for the calendar year 2013.

## 3. PORTFOLIO OVERVIEW

On October 23, 2003, the Government announced the creation of a new ministry to deliver real, positive change in the way we support our children, youth and families. A number of children and youth programs previously delivered by the Ministries of Community and Social Services, Health and Long-Term Care, and Community Safety and Correctional Services were integrated under MCYS.

MCYS began a transformation of youth justice services which included the disentanglement of youth justice facilities and programming from the Ministries of Community Safety and Correctional Services (MCSCS) and Community and Social Services. Based on an assessment of the existing facilities, and with the introduction of the federal Youth Criminal Justice Act, the Government committed to achieving a dedicated youth justice system separate and apart from adult corrections by April 1, 2009. To satisfy this commitment, four new purpose built facilities were constructed to enable the transfer-in of all youth from the adult correctional system. Currently, the youth justice services program is supported by twelve government owned secure custody/detention facilities where youth are provided programs and services.

### MCYS Youth Justice Services Delivery Model

The Ministry is mandated to provide community and custodial programs for youth in or at risk of conflict with the law. These programs are available through provisions under the Youth Criminal Justice Act. Also, the Child and Family Services Act was amended through Bill 103 to provide MCYS with the authority to fulfill its obligation under the Youth Criminal Justice Act for youths from twelve to seventeen years of age at the time of the offence.

The Youth Justice Services delivery model is a continuum of evidenced-based supports such as prevention, diversion and rehabilitation that contribute to community safety by addressing the underlying causes of youth crime and successfully transitioning youth out of custody.

Services such as probation and custody are mandatory based on court sentencing. Youth placed in custody/detention take part in structured programming including education (i.e. skills development, life skills programs, anger management) and rehabilitative programs that will help them develop the skills necessary to reintegrate back into the community.

### MCYS Youth Justice Services Facilities

The Ministry has twelve target class facilities. Seven of these facilities are operated by the Ministry, and five are operated by Transfer Payment Agencies. One of the Government operated facilities (Bluewater Youth Centre) has ended operations as of 2012 and is in the process of being decommissioned. The following table lists the target class facilities and the year they were built. Note that four of the facilities became operational in 2008 and 2009.

<b>YOUTH FACILITY NAME</b>	<b>LOCATION</b>	<b>YEAR BUILT</b>
"Bluewater Youth Centre (closed in 2012; currently being decommissioned)	Goderich	1962
Brookside Youth Centre	Cobourg	1870 to 1974
Cecil Facer Youth Centre	Sudbury	1971 & 1972
Sprucedale Youth Centre	Simcoe	1962, 1971, 1972, 1992
Maurice Genest Youth Centre	London	1975
Arrell Youth Centre	Hamilton	1989
William E. Hay Youth Centre	Ottawa	1995 to 2009
Syl Apps Youth Centre	Oakville	1972
Donald Doucet Youth Centre	Sault Ste. M.	2008
Ge-Da-Gi Binez Youth Centre	Fort Frances	2008
Justice Ronald Lester Youth Centre	Thunder Bay	2008
Roy McMurtry Youth Centre	Brampton	2008

## **4. ENERGY CONSUMPTION OVERVIEW**

The Ministry's consumption overview for the periods of 2006 to 2013 can be found in Appendix A.

## 5. PROGRESS

Given the relatively new status of the portfolio due to the transition of the legacy facilities and the increasing portfolio size as a result of four new purpose built facilities in recent years, there is not yet an energy conservation baseline established for this portfolio. However, the following trends are observable:

- A slight increase in Total Energy Consumed from 2012 to 2013 is noted due to the extremely cold winter and sub-zero temperatures experienced in the winter season of 2013. As the cold temperatures continued into 2014, it is expected that 2014 energy consumption will be similarly impacted.
- An increase in Total Energy Consumed from 2006 to 2009 due to the growth of the portfolio as the new purpose built facilities became operational in 2008 and 2009, followed by a decreasing trend in Total Energy Consumed from 2010 to 2012 as energy conservation efforts reduced consumption.
- A decreasing trend in Total GHG Emissions (in tonnes) between 2006 and 2013. This decreasing trend is due to two main factors: the generally decreasing annual consumption trend, and the reduction in the Current Emission Factor. Infrastructure Ontario (IO) reports that the Current Emission Factor for 2013 has dropped significantly due to the phase out of coal generated electricity.

## 6. ENERGY CONSERVATION MEASURES

The Ministry's target class facilities operate continuously (twenty-four hours a day, seven days a week), therefore there is a minimum level of energy that is required to operate our facilities appropriately and safely for the clients we serve. Due to the nature of the programs, there are limited opportunities to change operational requirements in order to realize significant energy consumption savings. Given these operational requirements, the primary opportunity for energy savings will be achieved through capital investment upgrades, particularly to the older legacy facilities. Section seven of this report outlines the current capital investment plan.

The Ministry is also acting proactively to contribute to energy consumption savings targets by utilizing recognized energy efficient construction design standards. All four of the Ministry's newly constructed secure youth facilities are designed to meet the Leadership in Energy and Environmental Design (LEED) Silver New Construction Designation, with Silver Certification being received for two of these facilities. LEED is intended to provide building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. The Ministry is also upgrading light fixtures to energy efficient options such as LED technology as fixtures are being replaced.

## 7. CONSERVATION FORECASTING AND LONG TERM PLAN

The Ministry's long term conservation plan includes continuing to use industry leading design standards to ensure new facilities are incorporating green building design, construction,

operations and maintenance. The Ministry will also work closely with our partners at the Ministry of Infrastructure and Infrastructure Ontario to continue to develop a comprehensive plan to improve energy conservation through fundamental capital upgrades to building envelope and operating systems, especially for the older facilities in the portfolio.

Approximately \$1.3 million in capital improvements are planned over the next two years such as HVAC upgrades, window renewal, exterior door renewal, roof upgrades, and assessments of electrical service and brick structures to identify opportunities to improve energy efficiency. The Ministry will continue to work with IO to refine these capital plans.

### Other Ministry Measures

As part of the transformation of the Youth Justice System, the Ministry has taken the strategic direction to close one of its target class facilities (Bluewater Youth Centre) which will reduce its overall carbon footprint. The Bluewater Youth Centre was announced for closure in 2012 and decommissioning activities have commenced. The Bluewater facility was one of the ministry's older buildings (51 years old) which would have required significant repairs to be sustained as a core asset as well as numerous upgrades and/or retrofits to achieve energy efficiency savings. The closure of this facility will result in a smaller portfolio footprint and a reduction in overall energy consumption for the Ministry.

In addition, the Ministry complies with the various government greening initiatives such as the Green Print Strategy whereby multifunctional devices (MFDs) are being installed replacing several single function devices such as fax machines, photocopiers and network printers, leading to an overall reduction in energy consumption. The Ministry is taking efforts to raise awareness through members of several of its divisional committees and local meeting agendas.

## **8. COMMUNICATION AND AWARENESS**

This report will be made available to ministry staff and the public through posting on the Ministry website by July 1, 2014.

In addition, the Ministry raises conservation awareness at forums such as Divisional Management Committee and Youth Centre Administrators meetings. Conservation awareness is also shared through broader communications, such as greening initiatives posted on the Ministry intranet website.

## **9. APPENDIX B – ENERGY CONSUMPTION BY BUILDING**

*Further information for the Province-wide energy consumption report can be found at the Ministry of Infrastructure site:*

[http://www.moi.gov.on.ca/en/infrastructure/energy\\_directive/](http://www.moi.gov.on.ca/en/infrastructure/energy_directive/)

