

Simcoe Muskoka Catholic District School Board Energy Conservation and Demand Management Plan

Education Sector Background

Funding and Energy Management Planning

All Boards receive 100% of their funding from the Ministry of Education.

The Ministry announces each Board's funding allocation in March for the next Fiscal Year which runs from September 1st to August 31st. The Ministry does not provide Boards with multi-year operational funding allocations.

As a result, while a Board may have a five-year energy management strategy, the Board's ability to implement their strategy is dependent on the funding that they receive in each of the five years covered by their energy management plan.

Asset Portfolios and Energy Management Planning

Energy consumption at a site can be impacted by a number of variables. The following lists provide education sector examples that may impact changes in consumption at a site from one year to the next. These examples will play a significant role in the Board's assessment of energy management priorities.

Facility Variables

- Year of Construction
- Building Area
 - Major additions
 - Buildings sold
 - Portables
 - installed
 - removed
- Site Use
 - · Elementary school
 - Secondary school

- · Administrative building
- Maintenance/warehouse facility
- Shared Use Sites
 - Community rooms
 - Libraries
 - Gymnasiums
- Equipment/Systems
 - Age
 - Type of technology
 - Lifecycle
 - % of building area that is air conditioned

Other Variables

- Programs
 - Day care
 - Before/After School Programs
 - Summer School
 - Community Use
- Occupancy
 - Significant Increase or decrease in number of students
 - New programs being added to a site

About the Board

The following statistics apply to the Board's Fiscal Year 2013-14

Total Number of Sites: 55

Total Number of Students: 20,449

Background

The Board has a qualitative energy conservation goal.

To date the Board's energy management strategy has included the following:

 Implementing energy saving designs into our new buildings as well as to additions or renovations in existing buildings. Such as, ventilation equipment that incorporates energy recovery technology, hydronic in-floor heating, interior daylight harvesting,

- "lights out" strategy on exterior of building during the hours that staff are not present
- Replacing older heating/cooling systems with modern energy efficient units
- Continually searching for and investigating new technologies for energy savings
- Making energy consumption data available on the Board website.
- installation of a building automation control system (BAS) in each school that can be monitored on a daily basis by the Board at a central location.
- Continuous monitoring and on-going commissioning of the current systems in place.
- Monitoring of total energy consumption for each school.
- Installation of wind turbine systems at five locations
- Use of a Solar to Air preheat system at a School where Natural Gas is not available.
- Use of a Solar to Water preheat system for Domestic Hot Water at a new School in Orillia.
- Use of Geo-thermal technology, including a full geo system at the new St.Bernards in Orillia
- Promoting green programs in schools with Eco school initiatives.

The Board has an in-house full time Energy Management position.

Energy Consumption Data for the Board

The values below are "metered" data for the Board.

Utility	Fiscal Year 2012-13 (Baseline)	Fiscal Year 2013-14 (Current)
Total Electricity (kWh)	22,406,512.00 (kwh)	22,832,248.00 (kwh)
Total Natural Gas (m3)	2,795,110.47 (m3)	2,512,648.06 (m3)
Total Heating Fuel (Type 1 and 2) (litres - L)	40,814.8 Litres	39,905 Litres
Total Heating Fuel (Type 3 and 4) (litres - L)	n/a	n/a
Total Propane (litres - L)	n/a	n/a
Total Wood (metric tonnes - MT)	n/a	n/a
Total District Heat (GJ)	n/a	n/a
Total District Cool (GJ)	n/a	n/a

The values below are raw data.

	Fiscal Year 2011-12 (Baseline)	Fiscal Year 2012-13 (Current)
Total Energy Consumed (eKWh)	51,252,052	49,972,520
Energy Intensity (eKWh/ft2)	16.53	14.93

Energy Conservation Goal

The Board has set out the following energy conservation goals for the next five fiscal years

Fiscal Year	2013-14 (ekWh/m2)	2014-15 (ekWh/m2)	2015-16 (ekWh/m2)	2016-17 (ekWh/m2)	2017-18 (ekWh/m2)
Conservation					
Goal	3.68	0.78	1.42	0.01	0.09

	FY 2013-14 to 2017-18 (ekWh/m2)
Cumulative Conservation Goal	25.86 (2.4 ekWh/ft2)

Renewable Energy

For a list of the Board's renewable energy projects, please see *Appendix A*.

Energy Management Strategies

Energy management strategies fall into three key categories:

- 1. Design/construction/retrofit
- 2. Operations and maintenance
- 3. Occupant Behaviour

1. <u>Design/Construction/Retrofit</u>

Definition

Design/construction/retrofit encompasses the original and ongoing intent of how a building and its systems are to perform as a whole through the integration of disciplines such as, architecture and engineering.

For the Board's relevant projects over the next five years, please refer to Appendix B.

2. Operations and Maintenance

Definition

Operations and maintenance includes the strategies the Board uses to ensure that the existing buildings and equipment perform at peak efficiency. For the Board's relevant projects over the next five years, please refer to Appendix C.

3. Occupant Behaviour

Definition

Strategies that the Board uses to educate occupants, including staff, students and community users, with an emphasis in changing specific behaviours to reduce energy consumption. For the Board's relevant projects over the next five years, please refer to Appendix D.

Environmental Programs

By 2013-14 twenty of the schools within the Board have participated in Eco Schools or other similar environmental programs.

Energy Efficient Incentives

The Board applies to incentive programs to support the implementation of energy efficient projects on a regular basis.

Between Fiscal Year 2009-10 and 2012-13, the Board has received \$ 597,000 in incentive funding from various agencies to support the implementation of energy efficient projects.

The Board uses the services of the sector's Incentive Program Advisor when needed.

Energy Procurement

The Board participates in the CSBSA Electricity Consortia to purchase electricity.

The Board participates in the CSBSA Natural Gas Consortia to purchase natural gas.

Demand Management

The Board monitors electrical Demand on a monthly basis through invoices, and has the ability to monitor real-time data at some sites on a daily basis.

The Board uses the following methodologies to reduce electrical Demand:

- a. Equipment scheduling
- b. Variable frequency drives on demand ventilation controlled equipment
- c. Deferred start-up of large equipment (e.g.: chiller start-up in spring)

The Board monitors Power Factor on the monthly bills from the Local Distribution Companies providing that information.

Senior Management Approval of this Energy Conservation and Demand Management Plan

I confirm that Simcoe-Muskoka Catholic District School Board's senior management has reviewed and approved this Energy Conservation and Demand Management Plan.

Brian Beal	June 25, 2014	
Brian Beal	Date	-
Director of Education		

appendix A					
Renewable Energy	Define	Number of systems in asset portfolio	Total size (kW)	Total number of ekWh generated annually	Actual or Estimated Generation (ekWh)
Solar photovoltaic		-		-	
Solar air	AHU pre-heat	one	2250kwh	2250	2191.24
Solar water	Domestic Hot Water	one	1	1500	1460
Wind Turbine		five	17.5	175	250
Biomass					
Other					

appendix B												
Design, Construction and Retrofit Strateg	ies											
		2013	3-14	2014	1 -15	201	5-16	201	6-17	2017	7-18	2013/14- 2017/18
Lighting	Quantity of Time that Measure will be in place (years)	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Total Accumulated Energy Savings (ekWh)
High Efficiency Lighting Systems (T-8, T-5, CFL, LED)	15	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-
Daylight Sensors	10	\$ -	-	\$ -	-	\$ 5,000	7,407	\$ -	-	\$ -	-	22,222
Outdoor Lighting	15	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-
Occupancy Sensors	10	\$ -	_	\$ -	_	\$ 5,000	7,407	\$ -	_	\$ -	_	22,222
Daylight Harvesting	10	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-
Day no man vesting		2013	R-14	2014	1-15	201	5-16	201	6-17	2017	7-18	2013/14-2017/18
HVAC	Quantity of Time that Measure will be in place	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementat ion	Estimated Annual Energy Savings	Estimated Total Accumulated Energy Savings (ekWh)
Efficient Boilers (near condensing)	30	\$ 175,000	303,001	\$ -	-	\$ -	-	\$ -	-	\$ -	-	1,515,004
High Efficiency Boilers (condensing)	15	\$ 199,000	516,833	\$ 60,000	155,829	\$ 115,000	298,672	\$ -	_	\$ -	_	4,103,496
Energy efficient Rooftop units	15	\$ 98,000	38,791	\$ -	-	\$ -	-	\$ -	_	\$ -	_	193,954
		2013		2014	1_15		5-16	-	6-17	2017	7-18	2013/14-2017/18
Controls	Quantity of Time that Measure will be in place	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Total Accumulated Energy Savings (ekWh)
Building Automation Systems - New	10	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-
Building Automation Systems - Upgrade	10	\$ -	-	\$ 30,000	23,749	\$ -	-	\$ -	-	\$ 30,000	23,749	118,747
		2013	3-14	2014	1-15	201	5-16	201	6-17	2017	7-18	2013/14-2017/18
Building Envelope	Quantity of Time that Measure will be in place	Estimated Cost of Implementat ion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of	Estimated Annual Energy	Estimated Cost of	Estimated Annual Energy	Estimated Cost of Implementat ion	Estimated Annual Energy Savings	Estimated Total Accumulated Energy Savings (ekWh)
Glazing	30	\$ 49,000	11,397	\$ -	_	\$ -	_	\$ -	_	\$ -	. ,	56,987
New Roof	25	\$ -	-	\$ 10,000	930	\$ 388,000	36,100	\$ -		\$ -	_	112,021
New Windows	30	\$ -		\$ 10,000	20,236	\$ 366,000	50,100	\$ -		\$ -		80,945
ivew williaows	30	- ب	-	87,000	20,236		-	- ڊ	-		-	00,945
Design, Construction and Retrofit Strate	gies Total	\$ 521,000	870,022	\$ 187,000	200,745	\$ 513,000	349,587	\$ -	-	\$ 30,000	23,749	6,225,599

appendix C														
Operations an	nd													
1 '	iu													
Maintenance													2042/44	
			2012	14	2014	45	2015	16	2016	17	2017	10	2013/14- 2017/18	
		Quantity of	2013	-14 Estimated	2014	Estimated	2015	Estimated	2016	-17 Estimated	2017	-18 Estimated	2017/18	
Policy and Plann	ning	Time that Measure will be in place (years)	Estimated Cost of Implementa tion	Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Annual Energy Savings from all projects (ekWh)	Estimated Total Accumulated Energy Savings (ekWh)	
Night time	Interior	10	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-	
blackout of sites	Exterior	10	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-	
Daylight Harvestin	•	3	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-	
Demand Ventilation	on (servid	3	\$ -	-	\$ 600	1,425	\$ 600	1,425	\$ 600	1,425	\$ -	-	12,825	
													2013/14-	
			2013		2014		2015		2016		2017		2017/18	
Energy Audits		Quantity of Time that Measure will be in place	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Total Accumulated Energy Savings (ekWh)	
Walk Through Aud	dit	5	\$ -	-	\$ 2,500	30	\$ 2,000	24	\$ 1,000	12	\$ -	-	214	
Engineering Audit		5	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-	
			2013		2014		2015	_	2016		2017	2017-18		
Real Time Monit	toring	Quantity of Time that Measure will be in place	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Total Accumulated Energy Savings (ekWh)	
operators to ident	tify and													
diagnose building		5	\$ 30,000	87,195	\$ -	-	\$ 5,000	14,533	\$ -	-	\$ -	_	479,574	
,,					-									
Operatio		laintenance tegies Total		87,195	\$ 3,100	1,455	\$ 7,600	15,981	\$ 1,600	1,437	\$ -	-	492,613	

appendix D												
Occupant												
Behaviour												
Strategies												
	Occupation of	201	3-14	2014	l-15	201	5-16	201	.6-17	2017	'-18	2013/14- 2017/18
Training and Education	Quantity of Time that Measure will be in place (years)	Estimated Cost of Implement ation	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implemen tation	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Cost of Implementa tion	Estimated Annual Energy Savings from all projects (ekWh)	Estimated Total Accumulated Energy Savings (ekWh)
Building Operator Training	3	\$ -	-	\$ -	_	\$ -	_	\$ -	_	\$ -	-	-
NRCan Benchmarking												
Program	5	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-
Building Automation Training (site specific)	3	\$ -	_	\$ -	_	\$ 300	3,179	\$ -	_	\$ -	_	9,537
Ongoing training and awareness programs for energy conservation	5	\$ -	_	\$ 500	401	\$ -	-	\$ -	_	\$ -	_	1,602
information on Building Operational costs	1	\$ -	_	\$ -	_	\$ -	_	\$ -	_	\$ -	-	-
Provide detailed information on energy consumption (e.g. via the Utility Consumption	1	\$ -		\$ -		\$ -		\$ -		\$ -		_
Participate in environmental programs,	1	7		· ·		Ÿ		7		Y		
such as EcoSchools,	1	\$ 1	2	\$ 1	2	\$ 1	2	\$ 1	2	\$ 1	2	24
Occupant Behaviour Stra	tegies Total	\$ 1	2	\$ 501	402	\$ 301	3,181	\$ 1	2	\$ 1	2	11,163

Conservation Goal - a	ppendix E														
	EV0040														
Total Building Area (includes	FY2013														
Total Building Area (includes	200 220					1 £12 _	0.0929 m²								
portables) (m²) Total Building Area (includes	260,238					111 =	0.0929 111								
portables) (ft²)	2,801,270														
Energy Consumption for the	2,002,270														
board (ekWh)	49,972,520														
								-						-	2047/10
	2013-14			2014-1			2015-1			2016-1			2017-1		2017/18
	Estimated Cost of Implementation	Estimated Annual Energy Savings from all projects (ekWh)		mated Cost of ementation	Estimated Annual Energy Savings from all projects (ekWh)		nated Cost of ementation	Estimated Annual Energy Savings from all projects (ekWh)		imated Cost of Iementation	Estimated Annual Energy Savings from all projects (ekWh)		Estima Annu Estimated Cost of Savin Implementation proje (ekW		Estimated Total Accumulated Energy Savings (ekWh)
Appendix B; Design, Construction and Retrofit		,									,			,	
Strategies Total	\$ 521,000	870,022	\$	187,000	200,745	\$	513,000	349,587	\$	_	0	\$	30,000	23,749	6,225,599
Appendix C; Operations and	ψ 321,000	070,022	7	107,000	200,743	 	313,000	343,307	<u> </u>		U	<u> </u>	30,000	23,743	0,223,333
Maintenance Strategies Total	\$ 30,000	87,195	\$	3,100	1,455	\$	7,600	15,981	\$	1,600	1,437	\$	_	0	492,613
Appendix D; Occupant	y 30,000	07,133	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3,100	1,433	 	7,000	13,301	 	1,000	1,437	 		U	432,013
Behaviour Strategies Total	\$ 1	2	Ś	501	402	Ś	301	3,181	Ś	1	2	\$	1	2	11,163
TOTAL			<u>'</u>	190,601		Ġ	520,901		\$	1,601		Ġ	30,001	23,751	6,729,375
Percentage reduction		2	7	130,001	0	٧	320,301	1	٧	1,001	0	٦	30,001	0	2.693230279
Conservation Goal (ekWh/m²)	7	3.68	1		0.78			1.42			0.01			0.09	25.86
	7		1												
Conservation Goal (ekWh/ft²)		0.3417089			0.07232502			0.13163623			0.000513497			0.00847867	2.40225869
															Energy Intensity Target = 12.5 ekwh

onfirm consecutive 12-month period (mont Sep 01, 2012 - Aug 31, 2013 Type of Public Agency (Sector): Agency Sub-sector School Board Energy Type and Amount Purchased and Consumed in Natural Units Electricity Natural Gas Fuel Oil 1 & 2 Fuel Oil 4 & 6 Propane Pool (Y/N) Portables **District Cooling** Canadian Martyrs
Catholic Education Centre
Father F.X. O'Reilly 219,928.92 kWh 37,975.50 Cubic meter 0.00 Giga Joule - chilled water | L9M1N6 | 37,501.46 | Square Feet | 60 | No | L4M5K3 | 21,108.31 | Square Feet | 70 | No | L0G1W0 | 34,517.67 | Square Feet | 60 | No | L0K1B0 | 14,679.82 | Square Feet | 60 | No | L9K1B0 | 47,651.83 | Square Feet | 60 | No | L9K1B9 | 41,861.37 | Square Feet | 60 | No | L9Z2B3 | 101,635.00 | Square Feet | 70 | No | L9Z2B3 | 101,635.00 | Square Feet | 70 | No | L9Z4B3 | 101,635.00 | Square Feet | 60 | No | L3Z2B3 | 101,635.00 | Square Feet | 60 | No | L3Z4B3 | 50,535.00 | Square Feet | 60 | No | L4M13 | 52,693.98 | Square Feet | 60 | No | L4M7B5 | 50,364.34 | Square Feet | 60 | No | L4M7B5 | 50,364.34 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | L3Z4B3 | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No | C3,921.59 | Square Feet | 60 | No 219,928,92 kWh 37,975.50 Cubic meter 351,071.12 kWh 13,338.20 Cubic meter 8.00 298,496.61 kWh 33,697.36 Cubic meter 67,591.84 kWh 0.00 Cubic meter 268,471.45 kWh 37,096.45 Cubic meter 14.00 1,308,395.00 kWh 163,901.12 Cubic meter 14.00 1,308,395.00 kWh 103,001.12 Cubic meter 02 year round daycare 32 Oil Heating Foley Holy Cross Holy Family Holy Trinity HS 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Giga Joule - steam or hot water 0.00 Giga Joule - steam or hot water 0.00 Giga 70,838.0 104,610.8 97,578.5 363,650.7 312,293.1 80,604.2 66,698.7 143,390.2 88,352.4 .39 year-round daycare .72 Chiller system 0 King St S 0 Giga Joule - chilled water 0.00 Giga Joule - chilled water
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0.00 Metric tonne 14.00 | 1,308,395.00 | kWh | 103,001.12 | Cubic meter | 1,900 | 1,074,892.22 | kWh | 91,825.41 | Cubic meter | 1.00 | 316,479.37 | kWh | 20,999.11 | Cubic meter | 3.00 | 233,355.29 | kWh | 19,349.33 | Cubic meter | 298,464.83 | kWh | 5,568.84 | Cubic meter | 5.00 | 232,515.00 | kWh | 30,931.88 | Cubic meter | 0.00 Litre Jean Vanier HS Marie of the Incar .77 year-round daycare Monsignor Castex year-round daycare Monsignor Clair Monsignor J.E. Ronan | L4M7B5 | 50,364,34 Square Feet | 60 No | L0G1A0 | 41,790.32 Square Feet | 60 No | 13V2H9 | 26,921.59 Square Feet | 60 No | P1L122 | 35,937.46 Square Feet | 60 No | L3V2H9 | 42,294.36 Square Feet | 60 No | L3V2H9 | 42,294.36 Square Feet | 60 No | L3V2H9 | 42,294.36 Square Feet | 60 No | L0V1H9 | 42,294.36 Square Feet | 60 No | L0V1H0 | 20,534.30 Square Feet | 60 No | L0V1H0 | 20,534.30 Square Feet | 60 No | L0V1H0 | 20,534.30 Square Feet | 60 No | L0V1H0 | 3,680.93 Square Feet | 60 No | L0V1H0 | 9,017.44 Square Feet | 60 No | L3V6S1 | 131,159.32 Square Feet | 60 No | L4N623 | 57,410.31 Square Feet | 60 No | L4N623 | 57,410.31 Square Feet | 60 No | L4N623 | 57,410.31 Square Feet | 60 No | L4N643 | 57,410.31 Square Feet | 60 No | L4M7G4 | 49,998.35 Square Feet | 60 No | L4M7G4 | 49,998.35 Square Feet | 60 No | L4M7G4 | 49,998.35 Square Feet | 60 No | L4M7G4 | 43,986.61 Square Feet | 60 No | L4M7G4 | 43,986.61 Square Feet | 60 No | L9M123 | 31,151.28 Square Feet | 60 No | L9M124 | 43,842.00 Square Feet | 60 No | L9X2H2 | 40,595.51 Square Feet | 60 No | L9X2H2 | 47,305.51 Square Feet | 60 No | L9X2H2 | 47,305.51 Square Feet | 60 No | L9X2H2 | 47,305.51 Square Feet | 60 No | L9X1W2 | 47,365.51 Square Feet | 60 No | L9X1W2 | 47,365.51 Square Feet | 60 No | L9X1W2 | 47,365.51 Square Feet | 60 No | L9X1W2 | 47,365.51 Square Feet | 60 No | L9X1W2 | 47,365.51 Square Feet | 60 No | L9X1W2 | 47,365.51 Square Feet | 60 No | L4N6X1 | 31,417.63 Square Feet | 60 No | L4N6X1 | 35,719.46 Square Feet | 60 No | L4N6X1 | 35,719.46 Square Feet | 60 No | L4N6X1 | 35,719.46 Square Feet | 60 No | L4N6X1 | 35,719.46 Square Feet | 60 No | L4N6X1 | 35,719.46 Square Feet | 60 No | L4N6X1 | 35,719.46 Square Feet | 60 No | L4N6X1 | 37,721.60 Square Feet | 60 No | L4N6X6 | 53,440.90 Square Feet | 60 No | L4N6X6 | 53,440.90 Square Feet | 60 No | L4N6X6 | 53,440.90 Square Feet | 60 No | L4N6X6 | 53,440.90 Square Feet | 60 No | L4N6X6 | 53,440.90 Square Feet | 60 No | L4N6X6 | 53,440.90 Square Feet | 60 No | L4N6X6 | 53,440.90 Square Feet | 60 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Giga Joule - s School 14 Fitton Hts School 2 Tamarack Trl 6.00 190,875.00 kWh 42,142.63 Cubic meter 2.00 353,968.82 kWh 43,348.63 Cubic meter 0.00 Litre 0.00 Litre 0.00 Giga Joule - chilled water Monsignor Lee
Monsignor Michael O'Leary
Mother Teresa
Notre Dame
Our Lady of Grace
Our Lady of Lourdes Bracebridge 0.00 0.00 Giga Joule - chilled water 127,474.6 109,809.2 125,531.4 3,530.1 66,852.2 27,348.1 57,989.4 455,429.4 0 Metric tonne 0.00 Giga Joule - chilled water 0.00 Giga Joule - chilled water 0.00 Giga Joule - steam or hot water 0.00 Giga Joule - steam or hot water 0.80 Under construction Our Lady of Lourdes Our Lady of Mercy Our Lady of the Assu 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.00 Metric tonne 0.00 Giga Joule - steam or hot water N 0.00 Metric tonne 0.0 5.38 Wind Turbine-not runnii 00 Giga Joule - chilled water 00 Gig 0 Giga Joule - chilled water Patrick Fogarty SS Plant Services School ... 97 Ferndale Drive
School 211 Ashford Dr
School 2214 Elizabeth St
School 130 Prince William Way
School 36 Silverwood Dr
School 123 Hamner St E
5 Dunlop St 455,429.4 45,302.7t 169,184.82 115,893.7t 143,597.1t 36,398.34 141,827.11 89,987.87 116,290.08 67,882.35 80,253.91 227,977.22 0.00 Litre 0.00 Litre 0.00 |
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0.00 Litre 0. Pope John Paul II Sacred Heart
Saint Gabriel the Archangel
Saint Mary's
Sister Catherine Donnelly
St Ann's Barrie
Huntsville
Barrie
Penetanguishene .99 year-round daycare .04 Wind Turbine t Antoine Daniel St Bernard's
St Charles
St Dominic's SS
St Francis of Assisi Geo-thermal 512,027.99 kWh 85,898.05 Cubic meter 7.00 647,940.94 kWh 28,335.66 Cubic meter 4.00 201,009.68 kWh 28,335.66 Cubic meter 1.00 290,070.00 kWh 17,469.19 Cubic meter 1.00 180,122.22 kWh 98,592.22 Cubic meter 6.00 1,186,465.33 kWh 98,592.22 Cubic meter 227,977.22 144,018.23 79,377.95 70,537.84 79,001.11 339,514.03 t James t Jean de Brebeuf Barrie Barrie Barrie Barrie St John Vianney
St Joseph's SS
St Marguerite D'Youville 0.00 0.00 Giga Joule - chilled water 0.00 0.00 Giga Joule - chilled water School 393 Innisfil St School 243 Cundles Rd E 0.00 Metric tonne 117,710.88 96,664.08 74,893.34 134,844.79 18.90 year-round daycare 17.94 240 Kozlov St 340 Leacock Dr .00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Giga Joule - chilled water 0.00 Giga Joule - chilled water 11.94 Wind Turbine 19.54 Data Center t Mary's t Monica's School 18 Saunders St School 90 Steel St Collingwood Barrie 0.00 Litre 0.00 Litre 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Metric tonne 0.00 Giga Joule - steam or hot water 0.00 Giga Joule - chilled water 0.00 Giga Joule - chilled water 308.245.71 kWh 50.434.40 Cubic meter 384.10.71 kWh 50.434.40 Cubic meter 220.518.95 kWh 40.306.01 Cubic meter 220.518.95 kWh 40.306.01 Cubic meter 5.00 48.957.72 kWh 52.539.79 Cubic meter 4.00 1,353.468.24 kWh 108.903.09 Cubic meter 4.00 1,353.468.24 kWh 108.903.09 Cubic meter 2.00 275.398.73 kWh 36.403.78 Cubic meter 4.00 1,353.458.24 kWh 108.903.09 Cubic meter 4.00 1,353.458.24 kWh 135.693.02 Cubic meter 6.00 375.593.15 kWh 36.403.78 Cubic meter 6.00 375.593.15 kWh 35.693.02 Cubic meter 5.00 375.593.15 kWh 35.693.02 Cubic meter 1.00.345.45 kWh 35.693.00 Cubic meter 1.00.345.45 kWh 32.941.48 Cubic meter 1.00.345.45 kWh 32.941.48 Cubic meter 4.00 308.130.00 kWh 41.399.02 Cubic meter 4.00 6.00 kWh 41.399.02 Cubic meter 4.00 6.00 kWh 41 0.00 Litre 0.00 Litre 0.00 Metric tonne
 Barrie
 L4M2E9
 43,206.34 Square Feet
 60 No

 Barrie
 L4N8G5
 55,444.90 Square Feet
 60 No

 Wasaga Beach
 L9Z
 37,221.60 Square Feet
 60 No

 New Tecumseth
 L9R1G5
 25,087.96 Square Feet
 168 No

 Barrie
 L4N6A3
 155,551.36 Square Feet
 70 No

 Midland
 L4R5B2
 142,518.45 Square Feet
 70 No

 Tottenham
 L0G1W0
 125,185.85 Square Feet
 70 No

 Barrie
 L4N0A6
 55,188.14 Square Feet
 60 No

 Barrie
 L4N0A6
 55,188.14 Square Feet
 60 No

 Barrie
 L4N0A6
 165,5100 Square Feet
 70 No
 0.00 Metric tonne 0.00 (Giga Joule - steam or hot water).00 (Giga Jou 0.00 Giga Joule - chilled water
0.00 Giga Joule - chilled water 0.00 Litre
0.00 Litre 14.33 year-round daycare 100 Lougheed Rd 425 Ramblewood Nicholas Noel Chabanel St Noel Chabanel
St Paul's
St Peter's
St Theresa's SS
St Thomas Aquinas
St. Bernadette
St. Catherine of Siena
St. Joan of Arc
L. Michael the Archangel
L. Patrick's 1 Wellington St E 1 Ashford Dr 105,090.94 440,302.37 Barrie
Midland
Tottenham
Barrie
Barrie 201 Ashford Dr 347 Galloway Blvd 2 Nolan Rd. P.O. Box 3000 101 Marsellus Dr 111 Summerset Dr 460 Mapleton Ave 380,600.9 318,927.8 104,209.8 137,866.5 438,981.5 55,188.14 | Square Feet 185,510.00 | Square Feet 49,794.90 | Square Feet 10,096.55 | Square Feet 47,511.90 | Square Feet 25,122.97 | Square Feet 43,156.80 | Square Feet 00 Metric tonne 349 Big Bay Point Rd 1588 Flos Road 4 West 100 James A. McCague A 15 Silver Birch Court 23 Cloughley Dr 0.00 0.00 Giga Joule - chilled water
0.00 0.00 Giga Joule - chilled water 20.99 Year-round daycare 0.00 closed 14.64

0.00 108,136.84 76,115.34 117,851.65

14.93 Average Energy

Press TAB to move to input areas. Press UP o Energy Consumption and Greenhouse Gas Emissions Reporting - for 2012

L0L2K0 L9R0G5

St. Patrick's
St. Paul's
St. Peter the Apostle Catholic School
The Good Shepherd