



ELECTRICITY ACT, 1998

ONTARIO REGULATION 507/18: BROADER PUBLIC SECTOR: ENERGY REPORTING AND
CONSERVATION AND DEMAND MANAGEMENT PLANS

ENERGY CONSUMPTION AND GREENHOUSE GAS EMISSIONS REPORT

CITY OF THUNDER BAY

June 12, 2019

In 2018, the Ministry of Energy, Northern Development and Mines enacted, under the *Electricity Act, 1998*, Ontario Regulation 507/18: Broader Public Sector: Energy Reporting and Conservation and Demand Management Plans to help public agencies including municipalities, hospitals, and schools manage and reduce their energy consumption. Under this Regulation, public agencies are required to report on their annual energy consumption and greenhouse gas emissions for prescribed facilities. The regulation also requires the development and implementation of conservation and demand management (CDM) plans every five years starting in 2014.

The data reported in 2019 is for the 2017 calendar year (January 1, 2017 to December 31, 2017).

O. Reg 507/18 outlines the operations for which the municipality is required to report on its energy use and greenhouse gas emissions and prepare CDM plans. The list of prescribed operations for which the municipality must report are:

- Administrative offices and related facilities including municipal council chambers
- Public libraries
- Cultural facilities, indoor recreational facilities and community centres, including art galleries, performing arts facilities, auditoriums, indoor sports arenas, indoor ice rinks, indoor swimming pools, gyms and indoor courts for playing tennis, basketballs or other sports
- Ambulance stations and associated offices and facilities
- Fire stations and associated offices and facilities
- Police stations and associated offices and facilities
- Storage facilities where equipment or vehicles are maintained, repaired or stored
- Buildings/facilities or facilities related to the treatment or pumping of water or sewage
- Parking garages

The prescribed operations must also be conducted in a building/facility that the municipality owns or leases, and the municipality must be issued and be responsible for paying the utility invoice.

The City of Thunder Bay facilities and energy consumption portfolio also includes other operations that were not included in the prescribed list of required reporting. Facilities and operations that were not included are:

- Outdoor pools and operations
- Homes for the Aged

- Tourism facilities and signage
- Animal Services facilities
- Commercial facilities
- Seasonal parks
- Waterfront facilities
- Conservatory
- Cemeteries
- Golf facilities and operations
- Daycares
- Stadiums
- Parking lot lighting
- Streetlighting
- Flashing lights and traffic control lighting
- Other outdoor lighting

As a result, the energy consumption and greenhouse gas emissions reported through O. Reg 507/18 is not inclusive of all the operations and facilities within the City of Thunder Bay's energy consumption portfolio.

For more information on the City of Thunder Bay's energy consumption, the Energy Consumption and Greenhouse Gas Emissions report, and energy management initiatives within City operations, please contact Vanessa DeGiacomo-Zwarsch at 807-684-2510 or email at vdegiacomozwarsch@thunderbay.ca.

Energy Consumption and Greenhouse Gas Emissions Reporting - for 2017

Confirm consecutive 12-mth period (mth-yr to mth-yr)
 Sector
 Agency Sub-sector
 Organization Name

January 2017 to December 2017
Municipality
City of Thunder Bay

Operation Name	Operation Type	Address	City	Postal Code	Total Floor Area	Unit	Average hrs/wk	Annual Flow (ML)	Electricity Quantity	Electricity Unit	Natural Gas Quantity	Natural Gas Unit	GHG Emissions (Kg)	Energy Intensity (kW/ha)	Energy Intensity (kW/Mega Litre)	Comments
Stephenson Building	Administrative offices and related facilities, including municipal council chambers	2160 Yonge Street	Toronto	M7A 2G5	135034	Square feet	70	23516.00224	2181065	kWh	125300	Cubic meter				Max. 255 characters
Volunteer Pool and Community Centre	Indoor swimming pools	180 Marsha St	Thunder Bay	P7A 8C1	21738	Square feet	85	0	432873	kWh	71009	Cubic Meter	141739.3698	54.62971833	0	Based on hours of operations.
125 S Syndicate Ave (CI)	Administrative offices and related facilities, including municipal council chambers	125 Syndicate Ave S	Thunder Bay	P7E 6H8	9709	Square feet	60	0	115181	kWh			1992.400938	11.86322649	0	
55A Centre	Indoor recreational facilities	700 River St	Thunder Bay	P7A 356	22500	Square feet	76	0	336934	kWh		28205	Cubic Meter	59151.41887	28.29735335	0
Archives	Administrative offices and related facilities, including municipal council chambers	235 Vickers St N	Thunder Bay	P7C 6A4	22000	Square feet	60	0	120306	kWh	31135	Cubic Meter	60945.72483	20.5091744	0	Based on hours of operations.
Armstrong EMS 43	Ambulance stations and associated offices and facilities	6 Northern Dr	Armstrong	P0T 1A0	1600	Square feet	168	0	10536.93	kWh			182.2678151	6.58558125	0	
Armstrong EMS 46	Ambulance stations and associated offices and facilities	4 Northern Dr	Armstrong	P0T 1A0	1600	Square feet	168	0	8413	kWh			145.528074	5.258125	0	
Armstrong EMS	Ambulance stations and associated offices and facilities	65 Queen Street, PO Box 6	Armstrong	P0T 1A0	2218	Square feet	168	0	30055.91176	kWh			519.9071617	13.55090702	0	
Balmoral Police Station	Police stations and associated offices and facilities	1200 Balmoral St	Thunder Bay	P7B 5Z5	65500	Square feet	168	0	1405131	kWh	113106	Cubic Meter	238147.2135	39.80452436	0	
Beardmore EMS	Ambulance stations and associated offices and facilities	133 Main St	Beardmore	P0T 1G0	2325	Square feet	84	0	29655.46	kWh			512.9801471	12.75503656	0	
Beck St EMS	Ambulance stations and associated offices and facilities	181 Beck St	Thunder Bay	P7A 2J7	2888	Square feet	168	0	10908	kWh	4101	Cubic Meter	7942.147911	18.86859885	0	
Brodie St Library	Public libraries	216 Brodie St S	Thunder Bay	P7E 1C2	24200	Square feet	65	0	305753	kWh		37957	Cubic Meter	77051.44443	29.3037833	0
Brown Street EMS	Ambulance stations and associated offices and facilities	1321 Brown St	Thunder Bay	P7E 2M4	3972	Square feet	168	0	15845.8	kWh	7889.93	Cubic Meter	15191.01533	25.10025594	0	Based on hours of operations.
Canada Games Complex	Indoor swimming pools	420 Winnipeg Ave	Thunder Bay	P7B 6B7	113022	Square feet	112	0	2090017.62	kWh	576978	Cubic Meter	1127003.31	72.74699738	0	Based on hours of operations.
Churchill Pool	Indoor swimming pools	130 Churchill Dr W	Thunder Bay	P7C 1V5	11015	Square feet	102	0	362563	kWh	78619	Cubic Meter	154910.8189	108.7706037	0	Based on hours of operations.
City Hall	Administrative offices and related facilities, including municipal council chambers	500 Donald St E	Thunder Bay	P7E 5V3	43500	Square feet	65	0	684279.22	kWh	91113.9	Cubic Meter	184099.0614	37.99120531	0	
Community Services Administration Building	Administrative offices and related facilities, including municipal council chambers	53 Water Street S	Thunder Bay	P7B 6E8	8600	Square feet	60	0	120935	kWh	40319	Cubic Meter	78320.12364	63.88794661	0	
Comtee EMS	Ambulance stations and associated offices and facilities	Fire #5750 Hwy 17/17	Comtee	P0T 1W0	3000	Square feet	84	0	12237	kWh			211.675626	4.079	0	
County Park Library	Public libraries	1020 Dawson Rd	Thunder Bay	P7B 1K6	4122	Square feet	50	0	47907	kWh			828.695286	11.62227074	0	Based on hours of operations.
Current River Arena	Indoor ice rinks	425 Grenville Ave	Thunder Bay	P7A 2B9	26310	Square feet	126	0	607700.824	kWh	68596	Cubic Meter	140201.4585	50.8066824	0	Full year ice including summer ice - ice plant runs continuously to maintain ice quality.
Current River Community Centre	Community centres	450 Dewe Ave	Thunder Bay	P7A 2G7	8050	Square feet	65	0	151925.206	kWh	11082	Cubic Meter	23579.93063	33.5033827	0	Includes office hours and regular programming hours.
Delaney Arena	Indoor ice rinks	300 Legion Track Dr/200 Hyde Park Ave	Thunder Bay	P7E 1Y2	35100	Square feet	126	0	772297.84	kWh	117173.51	Cubic Meter	224601.8176	55.83348753	0	October to April ice plant runs continuously to maintain ice quality. Also houses offices for Arena administration Jan- Dec.
Fort William Gardens	Indoor ice rinks	901 Miles St E	Thunder Bay	P7C 1I9	74000	Square feet	126	0	1369519.23	kWh	204018.65	Cubic Meter	409413.1118	47.80789116	0	October to April ice plant runs continuously to maintain ice quality. Also houses offices for Arena administration Jan- Dec.
Frederica Fire Station	Fire stations and associated offices and facilities	1710 Frederica St W	Thunder Bay	P7E 0A8	5150	Square feet	168	0	90497	kWh	14773	Cubic Meter	29495.64978	48.05847565	0	
Front and Egan Administration Building and Garage	Storage facilities where equipment or vehicles are maintained, repaired or stored	155 Front St	Thunder Bay	P7A 2P3	39010	Square feet	60	0	239843	kWh	121130	Cubic Meter	233160.4527	39.14856775	0	
Front and Egan AfterHours& Stores & Washbay	Storage facilities where equipment or vehicles are maintained, repaired or stored	155 Front St	Thunder Bay	P7A 2P3	4000	Square feet	168	0	41876.23	kWh	10560	Cubic Meter	21256.58425	39.32347206	0	
Geraldton EMS	Ambulance stations and associated offices and facilities	815 Main St, Box 1350	Geraldton	P0T 1M0	3961	Square feet	140	0	38661	kWh	7350	Cubic Meter	15094.24199	30.23250152	0	
Grandview Arena	Indoor ice rinks	300 Madeline St	Thunder Bay	P7A 5Y9	23310	Square feet	126	0	285456	kWh	46261.35	Cubic Meter	90510.14825	32.88217651	0	October to April ice plant runs continuously to maintain ice quality.
Greenstone EMS (Longlac)	Ambulance stations and associated offices and facilities	105 Skinner Ave, PO Box 640	Longlac	P0T 2A0	3280	Square feet	84	0	24615	kWh	8732	Cubic Meter	16934.74523	35.79778926	0	
Hodder Avenue Fire Station	Fire stations and associated offices and facilities	300 Hodder Ave	Thunder Bay	P7A 1T3	3000	Square feet	168	0	27475	kWh	8387	Cubic Meter	16331.9512	38.87005523	0	
Human Resources	Administrative offices and related facilities, including municipal council chambers	141 May St S	Thunder Bay	P7E 1A9	9400	Square feet	60	0	293262.58	kWh			5072.856109	31.19814681	0	
James Street Fire Station	Fire stations and associated offices and facilities	501 Churchill Dr W	Thunder Bay	P7C 1W2	5500	Square feet	168	0	61729.16	kWh	10554	Cubic Meter	21021.46837	31.0526283	0	
John Jumbuk Community Centre	Community centres	401 Jive St S	Thunder Bay	P7B 6A8	2870	Square feet	45	0	5913	kWh	5913	Cubic Meter	5013.83639	11.68538238	0	Includes office hours and regular programming hours.
Junot Ave EMS	Ambulance stations and associated offices and facilities	105 Junot St S	Thunder Bay	P7B 4X6	38000	Square feet	168	0	439007	kWh	44404.29	Cubic Meter	91545.89268	23.971734	0	
Junot Avenue Fire Station	Fire stations and associated offices and facilities	20 Junot Ave N	Thunder Bay	P7A 17L	3600	Square feet	168	0	61709	kWh	11086	Cubic Meter	22026.9332	49.86903773	0	
Kinsmen Youth Centre	Community centres	609 James St South	Thunder Bay	P7C 4T5	6732	Square feet	30	0	25033	kWh	9189	Cubic Meter	17805.99234	18.22514006	0	Based on hours of operations.
Manitouwadge EMS	Ambulance stations and associated offices and facilities	1 Paramedic Lane, PO Box 548	Manitouwadge	P0T 2C0	5080	Square feet	84	0	81023	kWh			1401.535854	15.94940945	0	
Maplewood Fire Station	Fire stations and associated offices and facilities	3000 Government Rd	Thunder Bay	P7G 1V5	4130	Square feet	168	0	49913	kWh	5912	Cubic Meter	12040.7819	27.29889047	0	
Maplewood Solid Waste and Recycling Bomag Building	Storage facilities where equipment or vehicles are maintained, repaired or stored	5405 Mapleward Rd	Thunder Bay	P7G 1R8	1750	Square feet	61	0	13644	kWh			236.013912	7.796571429	0	
Maplewood Solid Waste and Recycling Garage	Storage facilities where equipment or vehicles are maintained, repaired or stored	5405 Mapleward Rd	Thunder Bay	P7G 1R8	17510	Square feet	60	0	327866.02	kWh	52194.45	Cubic Meter	104352.0888	50.40531098	0	Main also feeds out to power 3 transtar units.
Maplewood Solid Waste& Recycling Admin Building/Kiosk	Administrative offices and related facilities, including municipal council chambers	5405 Mapleward Rd	Thunder Bay	P7G 1R8	5140	Square feet	61	0	97939.98	kWh	15590.55	Cubic Meter	31170.08055	51.29044138	0	Main also feeds out to power 3 transtar units.
Marathon EMS	Ambulance stations and associated offices and facilities	26 Peninsula Rd, PO Box 459	Marathon	P0T 2E0	3650	Square feet	84	0	19645	kWh			339.81921	5.382191781	0	
Mary J L Back Library	Public libraries	901 Edward St S	Thunder Bay	P7E 6R2	9440	Square feet	50	0	108794	kWh	11255	Cubic Meter	23160.9255	24.1995934	0	Based on hours of operation.
Mountdale - In-Ops	Storage facilities where equipment or vehicles are maintained, repaired or stored	410 Mountdale Ave	Thunder Bay	P7E 6G8	26900	Square feet	60	0	163626	kWh	133017.27	Cubic Meter	254316.4447	58.63583207	0	
Mountdale - Parks/Mechanics	Storage facilities where equipment or vehicles are maintained, repaired or stored	410 Mountdale Ave	Thunder Bay	P7E 6G8	14400	Square feet	60	0	178257	kWh	37277.69	Cubic Meter	73561.6968	39.89138725	0	
Mountdale Administration Building	Administrative offices and related facilities, including municipal council chambers	410 Mountdale Ave	Thunder Bay	P7E 6G8	10760	Square feet	60	0	113014.69	kWh	19502.46	Cubic Meter	38826.80555	29.76603028	0	
Nakina EMS	Ambulance stations and associated offices and facilities	204-B Thornton St, Box 429	Nakina	P0T 2H0	2100	Square feet	84	0	24700	kWh			427.2606	11.76190476	0	
Neebing Arena	Indoor ice rinks	1715 Bowker Rd	Thunder Bay	P7K 1L4	25000	Square feet	126	0	288857.43	kWh	52327	Cubic Meter	103927.4949	33.79908468	0	October to April ice plant runs continuously to maintain ice quality. Also houses offices for Arena administration Jan- Dec.
Neebing Fire Station	Fire stations and associated offices and facilities	2065 -20th Side Rd	Thunder Bay	P7K 1H6	5150	Square feet	168	0	78206	kWh	14782	Cubic Meter	29300.0557	45.69044653	0	
Nipigon EMS	Ambulance stations and associated offices and facilities	125 HOGAN RD, UNIT R	Nipigon	P0T 2J0	2050	Square feet	84	0	4789	kWh			9054.212703	24.82752393	0	
North Central Fire Station	Fire stations and associated offices and facilities	60 Water St S	Thunder Bay	P7B 6E8	24711	Square feet	168	0	256424	kWh	27802	Cubic Meter	56998.83421	22.33408021	0	
North End Community Centre	Community centres	954 Huron Ave	Thunder Bay	P7A 6L4	5400	Square feet	45	0	61829	kWh	14993	Cubic Meter	29415.68865	40.95764084	0	Includes office hours and regular programming hours.
North McIntyre Community Centre	Community centres	2051 Government Rd	Thunder Bay	P7G 2E9	10200	Square feet	60	0	52563	kWh	13468	Cubic Meter	26372.19921	19.18606869	0	Includes office hours and regular programming hours.
Oliver Road Community Centre	Community centres	563 Oliver Rd	Thunder Bay	P7B 2H2	10025	Square feet	60	0	64667	kWh	8849	Cubic Meter	17848.76889	15.83154077	0	Includes office hours and regular programming hours.
Parks North Admin/Garage	Storage facilities where equipment or vehicles are maintained, repaired or stored	645 Cumberland St N	Thunder Bay	P7A 4S2	19273	Square feet	60	0	75490	kWh			51825.77009	18.65173192	0	
Port Arthur Arena	Indoor ice rinks	420 Lisgar St	Thunder Bay	P7B 6T4	30087	Square feet	126	0	506511	kWh	98550.52	Cubic Meter	195083.9013	51.64635722	0	
Red Rock EMS - Frost St	Ambulance stations and associated offices and facilities	30 Frost St	Red Rock	P0T 2P0	700	Square feet	84	0	7585	kWh			131.20533	10.83571429	0	
Red Rock EMS	Ambulance stations and associated offices and facilities	4 Taylor St, Box 217	Red Rock	P0T 2P0	1638	Square feet	84	0	12676	kWh	2976	Cubic Meter	5845.7754	27.04778043	0	
Shuniah EMS	Ambulance stations and associated offices and facilities	1700A Lakeshore Dr	Shuniah	P7A 0T1	4750	Square feet	84	0	29152	kWh			504.271296	6.137263158	0	
South Neebing Community Centre	Community centres	1841 Mountain Rd	Thunder Bay	P7J 1A8	6960	Square feet	45	0	30834	kWh	6047	Cubic Meter	11965.988	13.66381717	0	Includes office hours and regular programming hours.
Terrace Bay EMS	Ambulance stations and associated offices and facilities	20 Cartier Dr, Box 400	Terrace Bay	P0T 2W0	2675	Square feet	84	0	40363	kWh			698.199174	15.08897196	0	
Thunder Bay Community Auditorium	Auditoriums	1 Paul Shaffer Dr	Thunder Bay	P7B 6C7	60000	Square feet	90	0	673629	kWh	68831	Cubic Meter	141786.1815	23.41915864	0	Hours of operation vary depending on number of events held per year. Approx 140 events per year - hours depend on types of event, ranging from 9:30am to 1:00am or 24 hours a day. Box office is opened 9:30 to 5:30 Tues to Sat.
Thunder Bay Training Centre	Fire stations and associated offices and facilities	750 Hammond Ave	Thunder Bay	P7B 6T5	13717	Square feet	40	0	84610	kWh	10532	Cubic Meter	21375.66734	14.32833326	0	Based on hours of operations.
Traffic Control & Streetlighting Admin/Garage	Storage facilities where equipment or vehicles are maintained, repaired or stored	625 Cumberland St N	Thunder Bay	P7A 4S2	10750	Square feet	60	0	44629	kWh	17405	Cubic Meter	33678.35538	21.35864732	0	
Transit Administration/Garage	Administrative offices and related facilities, including municipal council chambers	570 Fort William Rd	Thunder Bay	P7B 228	103000	Square feet	140	0	810045	kWh	195473	Cubic Meter	383578.69	28.03386848	0	
Upsala EMS	Ambulance stations															