

2030 TARGETS

ONTARIO DATA

Building Type's "Energy Use Intensity" (EUI) Goals for 2030 Challenge

Building Activity Category	Revised EUI ekWh/m ² ·yr	Data Source (see Notes)	50% REDUCTION	60% REDUCTION	70% REDUCTION	80% REDUCTION	90% REDUCTION	CARBON NEUTRAL
			ekWh/m ² ·yr Total EUI (Ontario) 2010	ekWh/m ² ·yr Total EUI (Ontario) 2014	ekWh/m ² ·yr Total EUI (Ontario) 2015	ekWh/m ² ·yr Total EUI (Ontario) 2020	ekWh/m ² ·yr Total EUI (Ontario) 2025	ekWh/m ² ·yr Total EUI (Ontario) 2030
Bank/Financial Institution	261	1	130.5	104.3	78.2	52.2	26.1	0.00
Courthouse	400	1	200.0	159.9	119.9	79.9	40.0	0.00
Office - 10,000 sf	251	1	125.5	100.3	75.2	50.1	25.1	0.00
Office - 10,001 to 100,000 sf	305	1	152.5	121.9	91.5	61.0	30.5	0.00
Office - 100,001 sf or greater	352	1	176.0	140.9	105.7	70.5	35.2	0.00
Retail - Mall	342	1	171.0	136.8	102.6	68.4	34.2	0.00
Retail - Non-mall, Vehicle Dealerships, misc.	279	1	138.0	111.4	83.6	55.7	27.9	0.00
Retail Store	235	1	117.5	93.8	70.4	46.9	23.5	0.00
Education(College/University (campus level)	423	1	211.5	169.4	127.0	84.7	42.3	0.00
Education - General	268	1	134.0	107.3	80.4	53.6	26.8	0.00
Education- K-12 School	265	1	132.5	105.8	79.4	52.9	26.5	0.00
Food Sales Convenience Store (w/ or w/out gas station)	779	1	389.5	311.5	233.6	155.7	77.9	0.00
Food Sales- General	727	1	363.5	290.8	218.1	145.4	72.7	0.00
Food Sales- Supermarket/Grocery	688	1	344.0	275.3	206.5	137.6	68.8	0.00
Storage- Refrigerated warehouse	410	1	205.0	164.1	123.1	82.1	41.0	0.00
Food Service- Fast Food	1721	1	860.5	688.3	516.2	344.2	172.1	0.00
Food Service - General	1131	1	565.5	452.4	339.3	226.2	113.1	0.00
Food Service- Restaurant/Cafeteria	973	1	486.5	389.3	292.0	194.6	97.3	0.00
Health Care - Clinic	290	1	145.0	116.0	87.0	58.0	29.0	0.00
Health Care - Hospital Inpatient	782	1	391.0	312.8	234.6	156.4	78.2	0.00
Health Care - Medical Office	204	1	102.0	81.5	61.1	40.7	20.4	0.00
Health Care - Nursing/Assisted Living	428	1	214.0	171.2	128.4	85.6	42.8	0.00
Health Care-Outpatient	254	1	127.0	101.7	76.3	50.9	25.4	0.00
Lodging - General	289	1	144.5	115.6	86.7	57.8	28.9	0.00
Lodging - Hotel/Motel	312	1	156.0	124.9	93.7	62.5	31.2	0.00
Lodging-Residence Hall/Dormitory	296	1	148.0	118.3	88.7	59.1	29.6	0.00
Public Assembly - Entertainment/Culture	340	1	170.0	136.1	102.1	68.1	34.0	0.00
Public Assembly - General	236	1	118.0	94.6	70.9	47.3	23.6	0.00
Public Assembly - Library	372	1	186.0	149.0	111.8	74.5	37.3	0.00
Public Assembly - Recreation	233	1	116.5	93.1	69.8	46.6	23.3	0.00
Public Assembly - Social/Meeting	186	1	93.0	74.5	55.9	37.3	18.6	0.00
Public Safety - Fire/Police Station	274	1	137.0	109.6	82.2	54.8	27.4	0.00
Public Safety- General	316	1	158.0	126.5	94.9	63.3	31.6	0.00
Religious Worship	172	1	86.0	68.7	51.5	34.4	17.2	0.00
Service (vehicle repair/service, postal service)	278	1	139.0	111.1	83.3	55.6	27.8	0.00
Storage-Distribution/Shipping Center	158	1	79.0	63.4	47.5	31.7	15.8	0.00
Storage - General	94	1	47.0	37.4	28.1	18.7	9.4	0.00
Storage- Non-refrigerated warehouse	112	1	56.0	44.6	33.5	22.3	11.2	0.00
Warehouse - Self-storage	14	1	7.0	5.8	4.3	2.9	1.4	0.00
Residential - Mobile Homes	387	2	193.5	154.8	116.1	77.4	38.7	0.00
Residential - Multi-family, 2 to 4 units	220	2	110.0	88.0	66.0	44.0	22.0	0.00
Residential - Multi-family, 5 or more units	220	2	110.0	88.0	66.0	44.0	22.0	0.00
Residential - Single-family Attached	256	2	128.0	102.4	76.8	51.2	25.6	0.00
Residential - Single-family Detached	267	2	133.5	106.8	80.1	53.4	26.7	0.00
Residential - Mid-Rise/ High Rise	220	2	110.0	88.0	66.0	44.0	22.0	0.00
Data Center		3						
Laboratory		4						
Mixed-Use		5						

** buildings will be evaluated based on *the year of completed contract documents, ready for tender.*

NOTES:

1. CBECS (Commercial Building Energy Consumption Survey) Average calculated as the arithmetic mean of reported EUIs across all survey buildings of the given type, then modified for the Ontario climate.
2. Canadian Comprehensive Energy Use Database for Ontario 2003
3. Recommend the use of Target Finder to derive data.
4. Recommend the use of Labs21 to derive data.
5. Recommend the use of the Calculator tab to develop single EUI.



Ontario Association of Architects

**This data was developed in 2014, by Bob Bach, Energy Profiles Ltd. in consultation with the Ontario Association of Architect's (OAA) Sustainable Built Environment Committee (SBEC)