Energy Records - 2025







KWANTLEN POLYTECHNIC UNIVERSITY

Facilities Department

Journal of Changes from 2007 Base Year to 2025

Year	Description of Changes Affecting Energy Consumption	
	Size Changes (m2)	Operational or Equipment
2007	C - Opened, N - Closed except Bldg 3/Unit 7(3715)(300), L - Farrier closed (-375)	
2008	S - Arbutus expanded added (4689)	S - Arbutus on Geothermal except old IET area.
2009	S - Main expanded added (4319), L - ISH added (425)	S - Main new north area on Geothermal. ISH lab uses 100% fresh air and up to 10x air changes/hour.
2010		L - New greenhouse lab under construction - west wing under construction and temp trailers on site, S- boiler main leak, L - Condensing boiler added, S - Condensing boilers added.
2011	L - ISH Greenhouse (758m)	
2012	L - CAHS open in Sept (2nd floor added 1335)	L - CAHS part year operation
2013		L - CAHS full year operation
2014		
2015	L - Brew Lab added (395)	Richmond renovations and construction site prep. Langley Brew Instructional Lab construction. Campus extended hours. L - Changed domestic hot water to condensing units. Hort - Replaced heating boilers with condensing.
2016		
2017		S - Leak in underground boiler main estimated 5% increase in natural gas consumption. Spruce construction estimated 5% increase in natural gas consumption. Hort leak in underground boiler piping increased natural gas. R - WSOD under construction.
2018	R - WSOD added (6155)	S - Spruce still under construction A - Monthly and Annual electrical data is calendarized
2019	S - demo old spruce, add new spruce (2126) CC - Civic Center Campus added (4391)	S - Natural gas consumption increased suspected due to Spruce which is being investigated to resolve.
2020		A - all electrical data calendarized for 2018-19-20 to match CGRT submission data. A - all consumption affected by COVID and restrictions for employees and students attending campuses.
2021		A - Emissions factor for electricity changed by CGRT from .038232 to .002694. Carbon emissions estimates from previous years in this document affected by this change. All campus consumption affected by COVID and restrictions for employees and students attending campuses. **Civic Energy** Intensity has significantly increased. Follow up needed. Suspect metering or invoicing errors. Carbon emissions for each campus are estimates only and actual values may vary. The BC Government CGRT website is used for official values.
2022		A - Increased ventilation due to COVID protocols. L - Full year of electric boiler in brew lab. R - Free level 2 EV charging 24x7 at Richmond, Langley? A - Added Gilbert Road Farm electrical connection to BC Hydro. Note: site m2 was not added to FIS.
2023		Formula error with L-Hort emissions intensity t/CO2e corrected,
2024		CGRT requested emissions factor for Civic District Energy electricity. Contacted City by phone on Feb 18 but they do not have this information available.
2024		In 2024 Fugitive Emissions for Refrigerants was added as a requirement and they increased emissions by 90.1 tCO2e
2025		Implemented night cleaning from 10 pm to 2 am on April 1, 2025. Performed exensive C.OP work at Cloverdale and Langley Main. Replaced 6/7 RTU on Cedar Bldg with ASHP. Exterior lighting being upgraded to LED. Surrey and part of Richmond upgraded interiour lights to LED. Civic electric meter that was missed during construction was added in 2025 and previous amounts of electricity not billed were assigned to 2025. **NOTE: electrical emissions factor went up significantly and electrical emissions went from 113 tCO2e in 2024 to 338 TCO2e in 2025 (67%) while actual electrical consumption went up by 1.3%**.

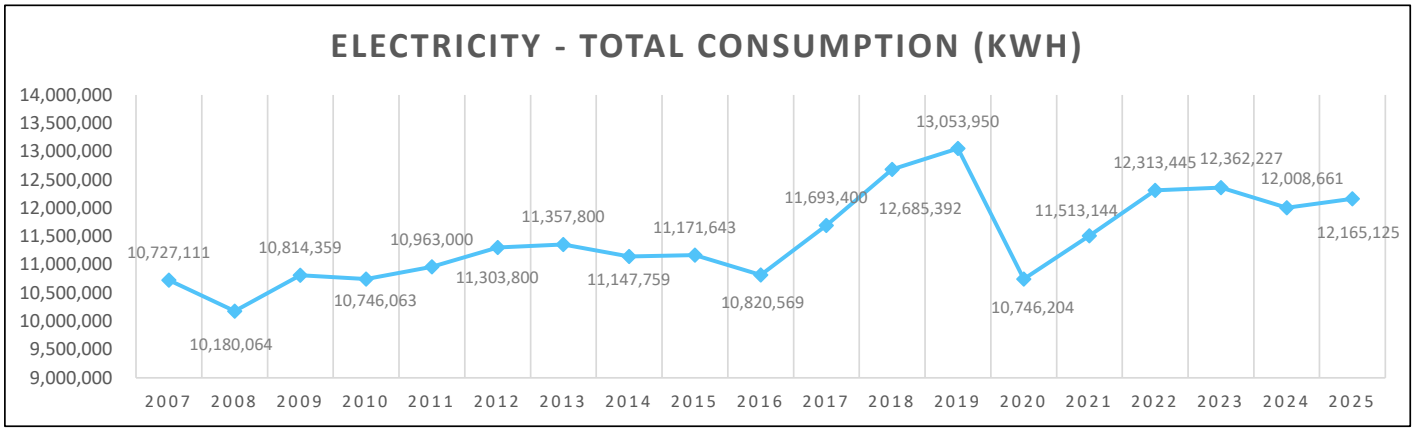
Energy Consumption - All Campuses Totals

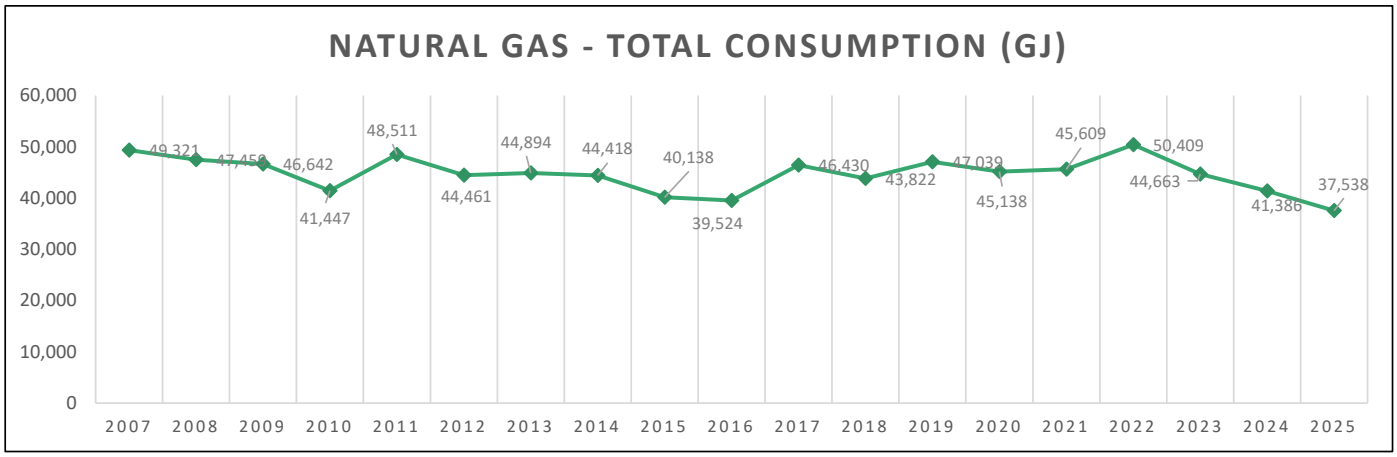
Year	M2	Electric kWh	Gas GJ	tCO2e for all Emissions	Intensities per M2					% Consumption and Campus Size Compared to 2007			eGJ per M2 compared to 2007
					kWh/m2	GJ/m2	tCO2e/m2	Total eGJ/m2	Total ekWh/m2	Electric	Gas	Size M2	
2007	96,645	10,727,111	49,321	2,710	111	0.51	0.0280	0.91	253				
2008	102,240	10,180,064	47,459	2,612	100	0.46	0.0255	0.82	229	-5%	-4%	5%	-10%
2009	105,997	10,814,359	46,642	2,781	102	0.44	0.0262	0.81	224	1%	-5%	9%	-11%
2010	106,422	10,746,063	41,447	2,478	101	0.39	0.0233	0.75	209	0%	-16%	9%	-17%
2011	102,407	10,963,000	48,511	2,891	107	0.47	0.0282	0.86	239	2%	-2%	6%	-6%
2012	103,165	11,303,800	44,461	2,665	110	0.43	0.0258	0.83	229	5%	-10%	6%	-9%
2013	104,500	11,357,800	44,894	2,545	109	0.43	0.0244	0.82	228	6%	-9%	8%	-10%
2014	104,500	11,147,759	44,418	2,382	107	0.43	0.0228	0.81	225	4%	-10%	8%	-11%
2015	104,500	11,171,643	40,138	2,194	107	0.38	0.0210	0.77	214	4%	-19%	8%	-15%
2016	104,895	10,820,569	39,524	2,276	103	0.38	0.0217	0.75	208	1%	-20%	8%	-18%
2017	104,895	11,693,400	46,430	2,599	111	0.44	0.0248	0.84	234	9%	-6%	8%	-7%
2018	104,895	12,685,392	43,822	2,422	121	0.42	0.0231	0.85	237	18%	-11%	8%	-6%
2019	117,567	13,053,950	47,039	2,573	111	0.40	0.0219	0.80	222	22%	-5%	18%	-12%
2020	117,567	10,746,204	45,138	2,466	91	0.38	0.0210	0.71	198	0.18%	-8%	18%	-22%
2021	117,567	11,513,144	45,609	2,435	98	0.39	0.0207	0.74	206	7%	-8%	18%	-19%
2022	117,751	12,313,445	50,409	2,694	105	0.43	0.0229	0.80	223	15%	2%	18%	-12%
2023	117,751	12,362,227	44,663	2,458	105	0.38	0.0209	0.76	210	15%	-9%	18%	-17%
2024	117,751	12,008,661	41,386	2,428	102	0.35	0.0206	0.72	200	12%	-16%	18%	-21%
2025	117,751	12,165,125	37,538	2,435	103	0.32	0.0207	0.69	192	13%	-24%	18%	-24%

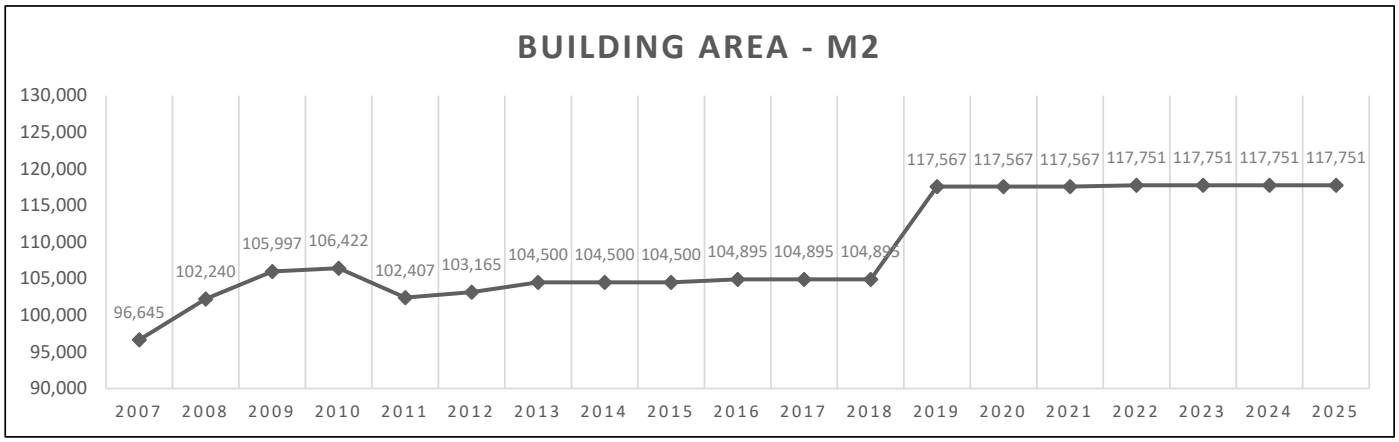
Energy Units Equivalencies

Year	Electric kWh	Gas GJ	ekWh			eGJ			MMBTU		
			Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total
2007	10,727,111	49,321	10,727,111	13,701,485	24,428,596	38,615	49,321	87,936	36,574	46,757	83,331
2008	10,180,064	47,459	10,180,064	13,183,999	23,364,063	36,645	47,459	84,104	34,709	44,991	79,700
2009	10,814,359	46,642	10,814,359	12,957,009	23,771,368	38,929	46,642	85,570	36,872	44,216	81,088
2010	10,746,063	41,447	10,746,063	11,513,899	22,259,962	38,683	41,447	80,129	36,639	39,291	75,930
2011	10,963,000	48,511	10,963,000	13,476,300	24,439,300	39,464	48,511	87,974	37,378	45,988	83,367
2012	11,303,800	44,461	11,303,800	12,351,182	23,654,982	40,690	44,461	85,151	38,540	42,149	80,689
2013	11,357,800	44,894	11,357,800	12,471,581	23,829,381	40,885	44,894	85,779	38,725	42,560	81,284
2014	11,147,759	44,418	11,147,759	12,339,182	23,486,941	40,129	44,418	84,546	38,008	42,108	80,116
2015	11,171,643	40,138	11,171,643	11,150,364	22,322,007	40,215	40,138	80,353	38,090	38,051	76,141
2016	10,820,569	39,524	10,820,569	10,979,656	21,800,225	38,951	39,524	78,475	36,893	37,468	74,361
2017	11,693,400	46,430	11,693,400	12,898,254	24,591,654	42,093	46,430	88,523	39,869	44,016	83,884
2018	12,685,392	43,822	12,685,392	12,173,696	24,859,088	45,664	43,822	89,486	43,251	41,543	84,794
2019	13,053,950	47,039	13,053,950	13,067,462	26,121,412	46,990	47,039	94,030	44,508	44,593	89,101
2020	10,746,204	45,138	10,746,204	12,539,253	23,285,457	38,683	45,138	83,821	36,639	42,791	79,430
2021	11,513,144	45,609	11,513,144	12,670,264	24,183,408	41,444	45,609	87,053	39,254	43,238	82,492
2022	12,313,445	50,409	12,313,445	14,003,620	26,317,065	44,325	50,409	94,734	41,983	47,788	89,771
2023	12,362,227	44,663	12,362,227	12,407,298	24,769,525	44,500	44,663	89,163	42,149	42,340	84,489
2024	12,008,661	41,386	12,008,661	11,497,114	23,505,775	43,228	41,386	84,614	40,944	39,234	80,178
2025	12,165,125	37,538	12,165,125	10,428,056	22,593,181	43,791	37,538	81,329	41,477	35,586	77,063

Annual Energy Consumption and Building Size







Energy Intensity per M2 by Campus

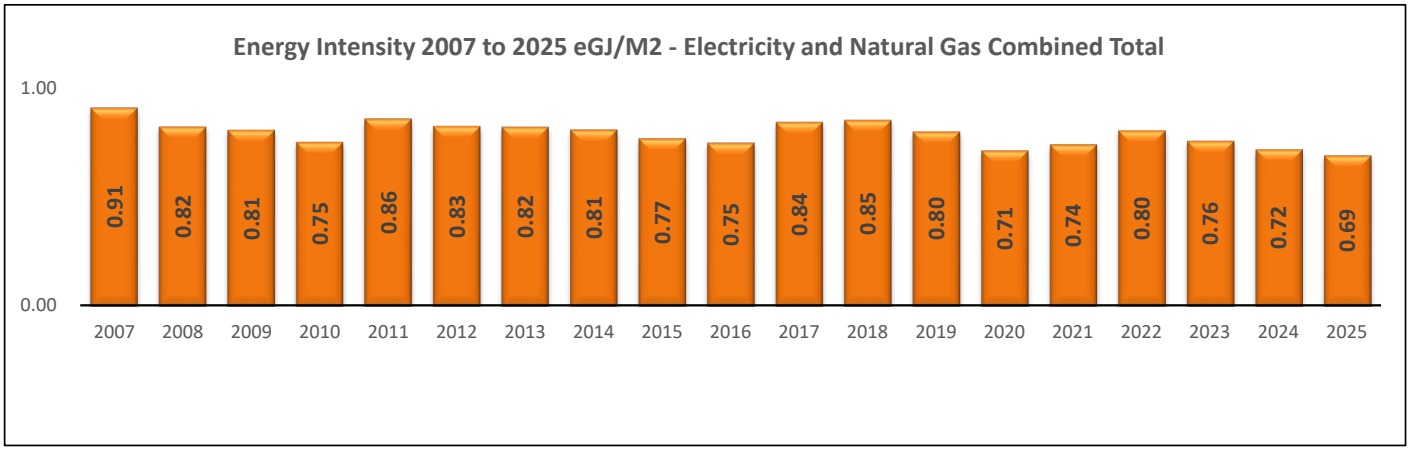
	Electric - kWh/M2					
	Civic	Cloverdale	Langley	Langley H	Richmond	Surrey
2007		82	94	86	102	151
2008		77	87	84	94	129
2008		77	109	83	93	127
2010		78	113	89	90	127
2011		80	111	127	92	130
2012		81	121	116	90	134
2013		78	123	102	90	132
2014		75	123	101	91	128
2015		81	127	68	91	127
2016		81	107	65	88	129
2017		85	133	93	92	133
2018		87	132	76	113	144
2019	106	89	131	81	90	135
2020	108	78	113	78	72	105
2021	249	80	117	80	77	101
2022	200	81	119	104	85	117
2023	210	78	115	103	90	115
2024	183	78	109	140	85	113
2025	213	81	109	137	87	111

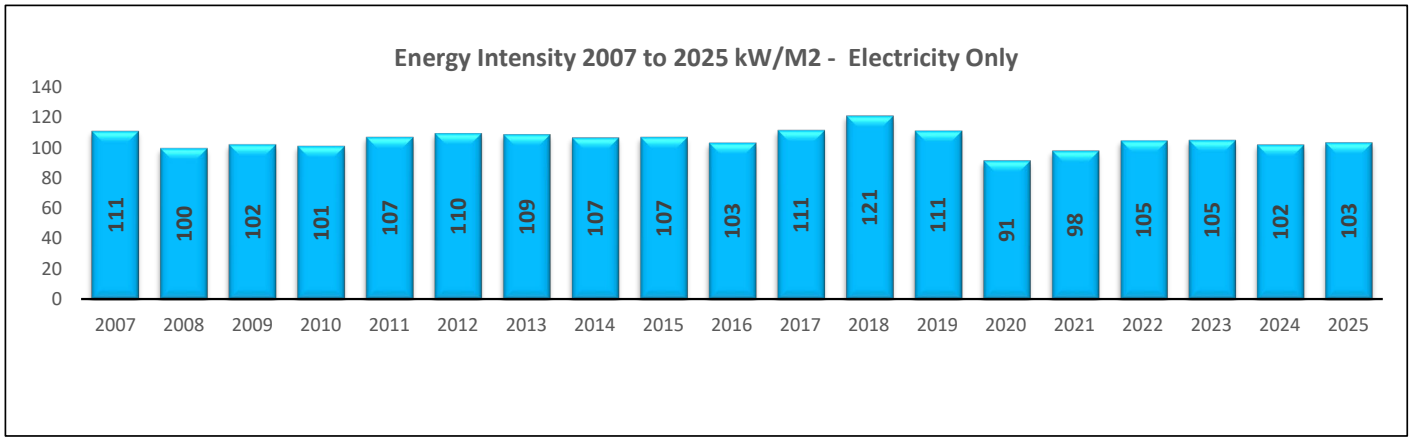
	Natural Gas - GJ/M2					
	Civic	Cloverdale	Langley	Langley H	Richmond	Surrey
2007		0.35	0.59	1.26	0.45	0.55
2008		0.34	0.55	1.24	0.39	0.51
2008		0.37	0.57	1.29	0.34	0.44
2010		0.32	0.52	1.44	0.31	0.37
2011		0.39	0.61	2.04	0.38	0.40
2012		0.37	0.58	1.56	0.30	0.38
2013		0.39	0.55	1.85	0.29	0.35
2014		0.36	0.51	1.89	0.30	0.36
2015		0.34	0.49	1.57	0.28	0.31
2016		0.36	0.46	1.44	0.28	0.31
2017		0.40	0.56	1.57	0.38	0.34
2018		0.35	0.50	1.35	0.33	0.39
2019		0.37	0.47	1.43	0.29	0.43
2020		0.36	0.42	1.32	0.29	0.41
2021		0.38	0.43	1.35	0.28	0.42
2022		0.40	0.49	1.22	0.34	0.47
2023		0.36	0.41	1.31	0.29	0.41
2024		0.33	0.37	1.32	0.26	0.38
2025		0.32	0.36	1.16	0.24	0.32

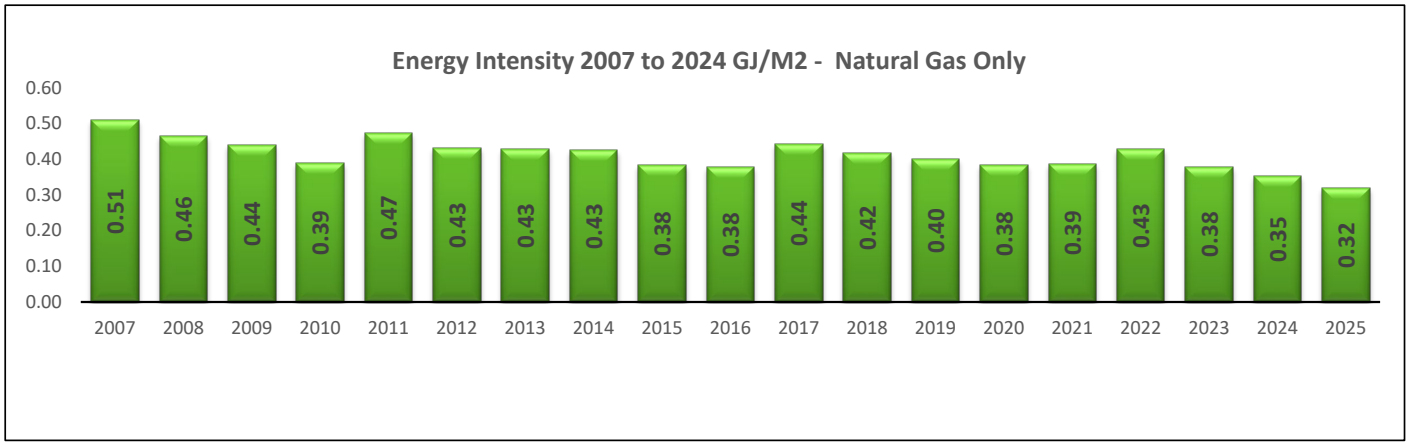
	Electric and Gas - ekWh/M2					
	Civic	Cloverdale	Langley	Langley H	Richmond	Surrey
2007		179	259	437	226	303
2008		173	240	427	202	270
2009		180	268	441	187	250
2010		168	257	489	176	231
2011		188	280	694	197	240
2012		184	282	549	174	239
2013		188	276	617	172	229
2014		175	265	625	173	229
2015		176	262	503	169	215
2016		180	233	464	164	216
2017		196	287	529	196	228
2018		184	271	451	203	251
2019	106	192	260	479	170	254
2020	108	178	229	445	152	220
2021	249	185	236	455	156	217
2022	200	192	254	444	179	246
2023	210	177	230	467	171	228
2024	183	170	210	507	158	218
2025	213	169	210	459	153	201

	Electric and Gas - eGJ/M2					
	Civic	Cloverdale	Langley	Langley H	Richmond	Surrey
2007		0.64	0.93	1.57	0.81	1.09
2008		0.62	0.86	1.54	0.73	0.97
2009		0.65	0.97	1.59	0.67	0.90
2010		0.60	0.93	1.76	0.63	0.83
2011		0.68	1.01	2.50	0.71	0.86
2012		0.66	1.01	1.98	0.63	0.86
2013		0.68	0.99	2.22	0.62	0.82
2014		0.63	0.95	2.25	0.62	0.82
2015		0.63	0.94	1.81	0.61	0.77
2016		0.65	0.84	1.67	0.59	0.78
2017		0.70	1.03	1.90	0.71	0.82
2018		0.66	0.98	1.62	0.73	0.90
2019	0.38	0.69	0.94	1.73	0.61	0.91
2020	0.39	0.64	0.83	1.60	0.55	0.79
2021	0.90	0.67	0.85	1.64	0.56	0.78
2022	0.72	0.69	0.91	1.60	0.64	0.89
2023	0.76	0.64	0.83	1.68	0.61	0.82
2024	0.66	0.61	0.76	1.82	0.57	0.79
2025	0.77	0.61	0.76	1.65	0.55	0.72

Energy Use Intensity 2007 to 2024



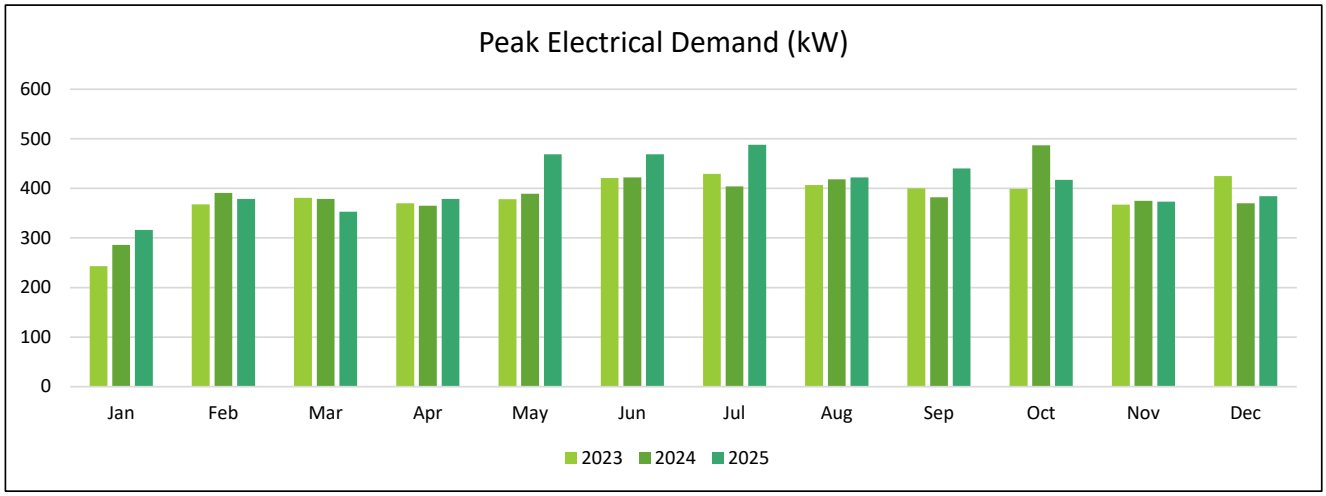




Electrical Demand

Cloverdale (Service size 3000 kVA)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	243	368	381	370	378	421	429	407	400	399	367	425
2024	286	391	379	365	389	422	404	418	382	487	375	370
2025	316	379	353	379	469	469	488	422	440	417	373	384

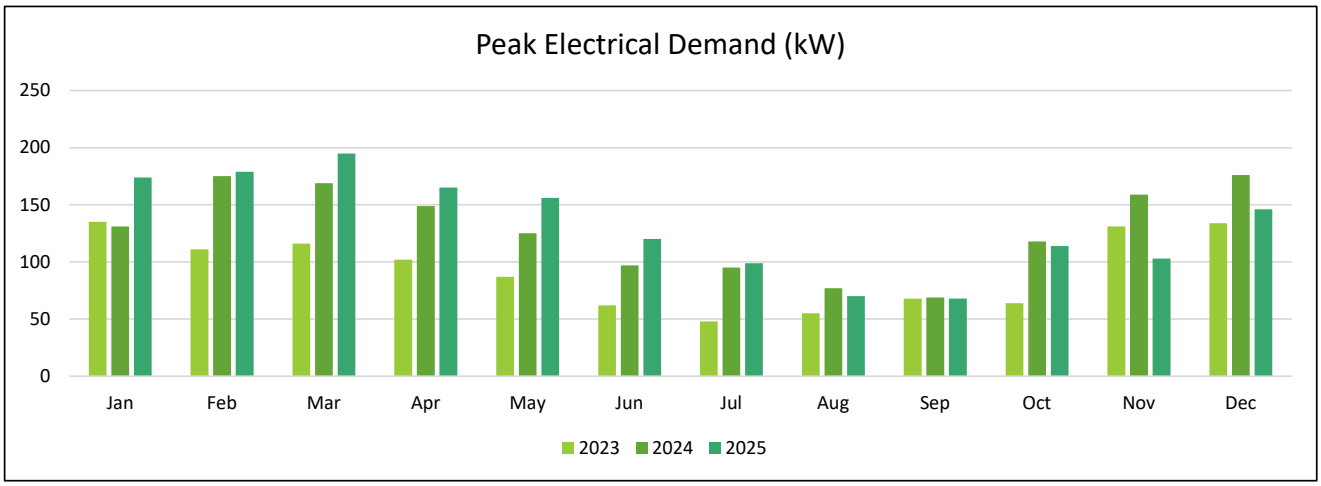


Electrication Projects

May-25 Replaced natural gas hot water tank with electric hot water tank

Langley Hort (Service size 300 kVA)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	135	111	116	102	87	62	48	55	68	64	131	134
2024	131	175	169	149	125	97	95	77	69	118	159	176
2025	174	179	195	165	156	120	99	70	68	114	103	146

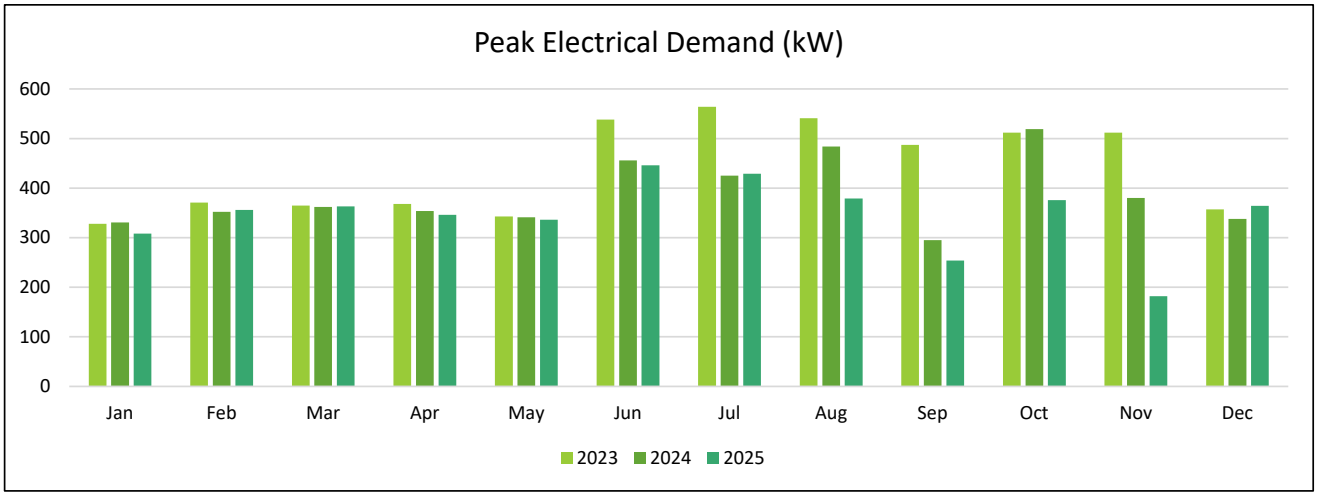


Electrication Projects

TBD by others

Langley Main (Service size 3000 kVA)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	328	371	365	368	343	538	564	541	487	512	512	357
2024	331	352	362	354	341	456	425	484	295	519	380	338
2025	308	356	363	346	336	446	429	379	254	376	182	364

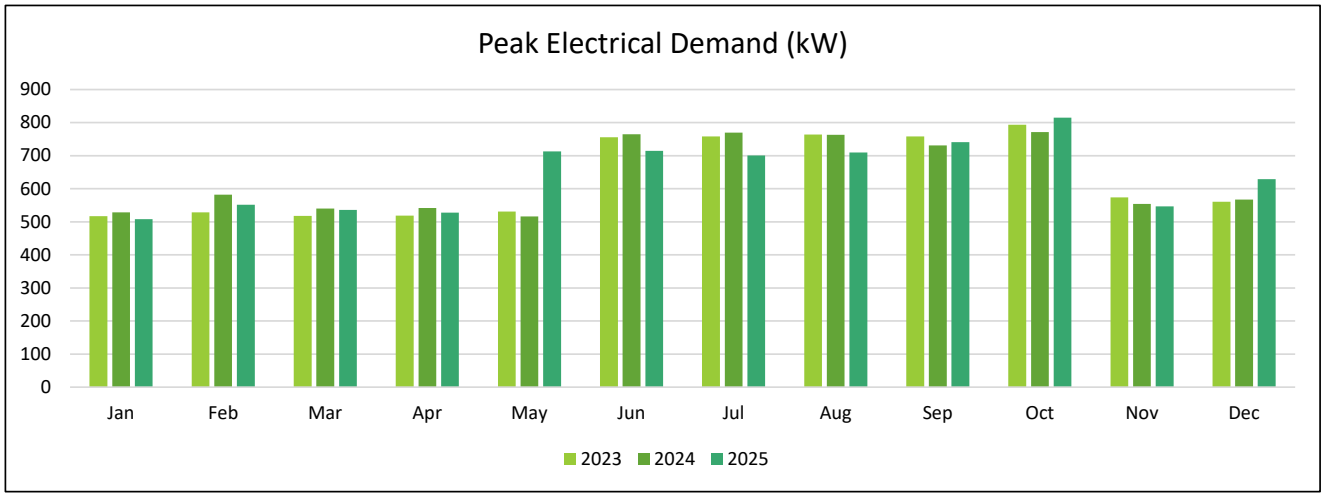


Electrication Projects

Nov-25 Replaced natural gas hot water tank with electric hot water tank

Richmond (Service size 2500 kVA x 2 transformers)

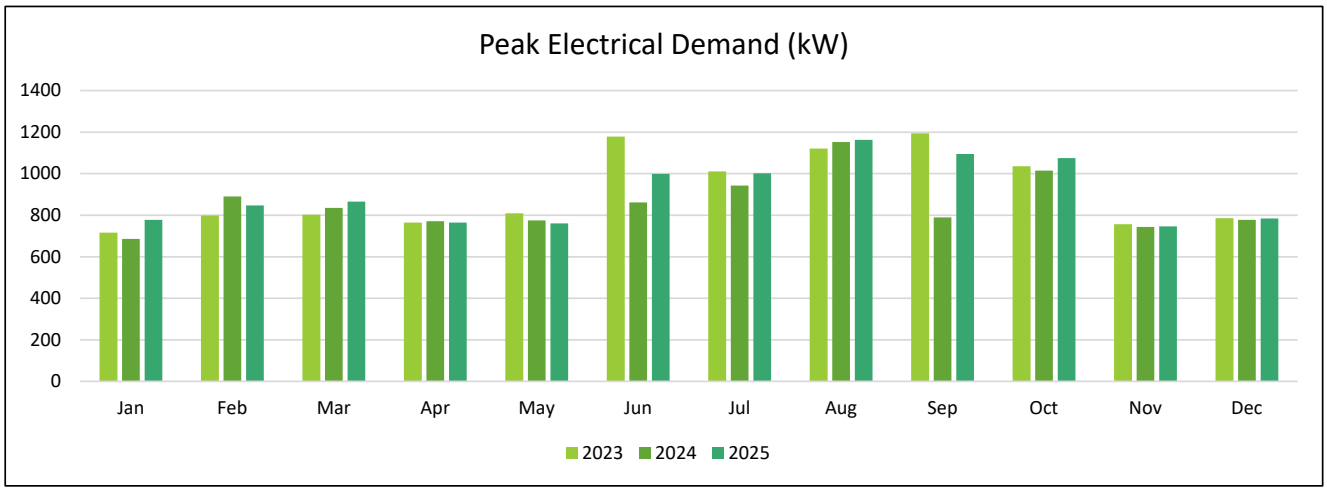
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	517	529	518	519	531	756	758	764	758	794	574	561
2024	529	582	540	542	516	765	770	763	731	771	554	567
2025	508	552	536	528	713	715	701	710	741	815	547	629



Electrication Projects

Surrey (Service size 2500 kVA)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	716	799	803	764	809	1179	1011	1121	1194	1036	756	786
2024	686	890	835	771	775	861	943	1152	789	1015	744	777
2025	777	847	865	764	761	999	1002	1163	1094	1075	746	784



Electrication Projects

May-25 Replace 5 of 7 RTU units that use natural gas and DX cooling with ASHP technolgy (Gym has natural gas for peak loads)

Carbon Emissions Estimates by Campus, Total Emissions by Category, and % Reductions from Base Year

	Carbon Emissions (tCO2e) (Natural Gas/Electricity only)(these estimates provide the approximate value per campus and the actual emissions values per campus (old emissions factor) will be different)(Garden City Farm is not included in totals below)							CGRT Total (Elect/NG) Official Value		CGRT Total (all emissions) Official Value	Reduction from 2007 (all)	Reduction from 2007 (Elec/NG)
	Civic	Cloverdale	Langley	Langley - H	Newton	Richmond	Surrey					
2007		358	477	202	124	704	845	2,710		2,710	0.00%	0.00%
2008		353	452	197	63	618	921	2,604		2,612	3.62%	3.90%
2009		376	479	205	65	541	913	2,579		2,781	-2.62%	4.83%
2010		333	450	229	21	497	788	2,318		2,478	8.56%	14.45%
2011		396	521	325	Closed	601	833	2,710		2,891	-6.68%	0.00%
2012		378	502	310	Closed	490	802	2,511		2,665	1.66%	7.34%
2013		398	518	365	Closed	479	744	2,410		2,545	6.09%	11.07%
2014		345	460	366	Closed	450	704	2,249		2,382	12.10%	17.03%
2015		332	437	304	Closed	423	617	2,072		2,194	19.04%	23.54%
2016		346	416	279	Closed	419	618	2,144		2,276	16.01%	20.89%
2017		385	509	305	Closed	561	670	2,430		2,599	4.10%	10.32%
2018		337	461	262	Closed	497	755	2,323		2,422	10.63%	14.28%
2019	5	359	429	279	Closed	527	875	2,487		2,573	5.06%	8.23%
2020	5	347	386	257	Closed	524	837	2,367		2,466	9.00%	12.66%
2021	11	364	397	263	Closed	516	836	2,385		2,435	10.15%	11.99%
2022	9	386	445	239	Closed	615	939	2,655		2,694	0.59%	2.03%
2023	10	344	380	256	Closed	533	827	2,383		2,458	9.30%	12.07%
2024	8	322	339	259	Closed	484	771	2,275		2,428	10.41%	16.05%
2025	11	360	394	259	Closed	523	779	2,327		2,435	10.15%	14.13%

All emissions "Total" data for electricity and natural gas as well as all emissions are from the BC government CGRT website

Note for year 2025: electrical emissions factor went up significantly and electrical emissions went from 113 tCO2e in 2024 to 338 TCO2e in 2025 (67%) while actual electrical consumption went up by 1.3%.

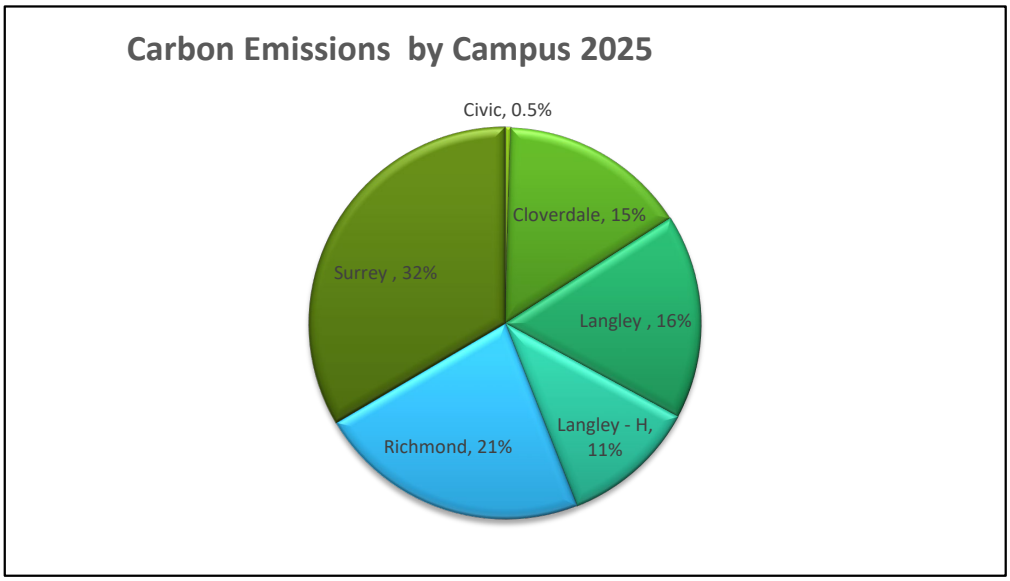
Carbon Emissions Intensity by Campus per M2

	Intensity (tCO2e/M2)						
	Civic	Cloverdale	Langley	Langley - H	Richmond	Surrey	Average
2007		0.019	0.032	0.065	0.025	0.031	0.028
2008		0.019	0.029	0.064	0.022	0.028	0.026
2009		0.020	0.031	0.066	0.019	0.025	0.026
2010		0.018	0.028	0.074	0.017	0.022	0.023
2011		0.021	0.033	0.105	0.021	0.023	0.028
2012		0.020	0.032	0.080	0.017	0.022	0.026
2013		0.021	0.030	0.095	0.017	0.020	0.024
2014		0.019	0.027	0.095	0.016	0.019	0.023
2015		0.018	0.025	0.079	0.015	0.017	0.021
2016		0.019	0.024	0.072	0.015	0.017	0.022
2017		0.021	0.029	0.079	0.020	0.018	0.025
2018		0.018	0.026	0.068	0.017	0.021	0.023
2019	0.001	0.019	0.024	0.072	0.015	0.023	0.022
2020	0.001	0.019	0.022	0.067	0.015	0.022	0.021
2021	0.003	0.020	0.023	0.068	0.015	0.022	0.021
2022	0.002	0.021	0.025	0.062	0.018	0.024	0.023
2023	0.002	0.019	0.022	0.066	0.015	0.021	0.021
2024	0.002	0.017	0.019	0.067	0.014	0.020	0.021
2025	0.002	0.019	0.022	0.067	0.015	0.020	0.021

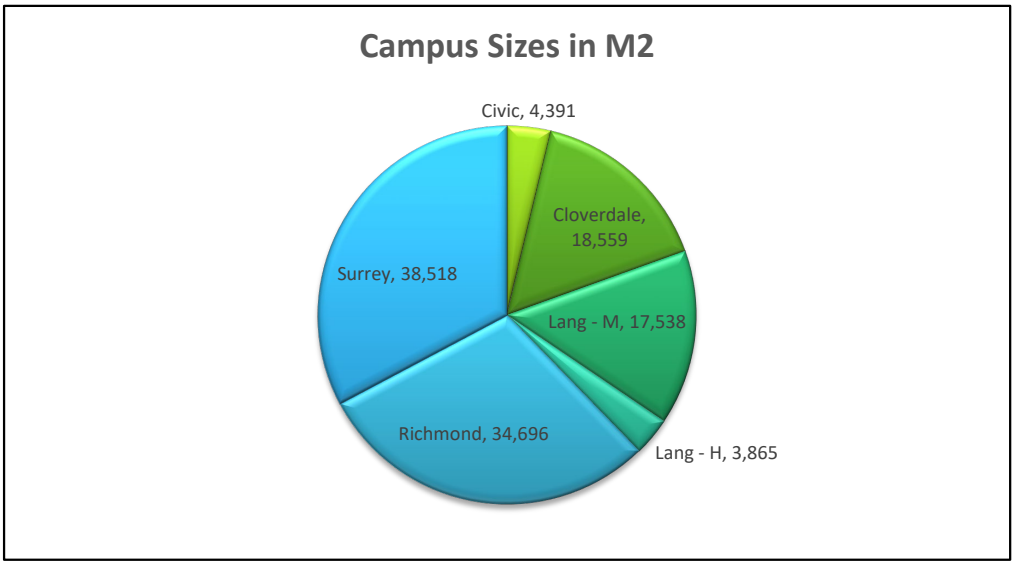
Carbon Emissions by Campus % of all Campuses

	Carbon Emissions (tCO2e)						
	Civic	Cloverdale	Langley	Langley - H	Newton	Richmond	Surrey
2007		13%	18%	7%	5%	26%	31%
2008		14%	17%	8%	2%	24%	35%
2009		14%	17%	7%	2%	19%	33%
2010		13%	18%	9%	1%	20%	32%
2011		14%	18%	11%		21%	29%
2012		14%	19%	12%		18%	30%
2013		16%	20%	14%		19%	29%
2014		15%	19%	15%		19%	30%
2015		15%	20%	14%		19%	28%
2016		15%	18%	12%		18%	27%
2017		15%	20%	12%		22%	26%
2018		14%	19%	11%		21%	31%
2019	0.2%	14%	17%	11%		21%	34%
2020	0.2%	14%	16%	10%		21%	34%
2021	0.5%	15%	16%	11%		21%	34%
2022	0.3%	14%	17%	9%		23%	35%
2023	0.4%	14%	15%	10%		22%	34%
2024	0.3%	13%	14%	11%		20%	32%
2025	0.5%	15%	16%	11%		21%	32%

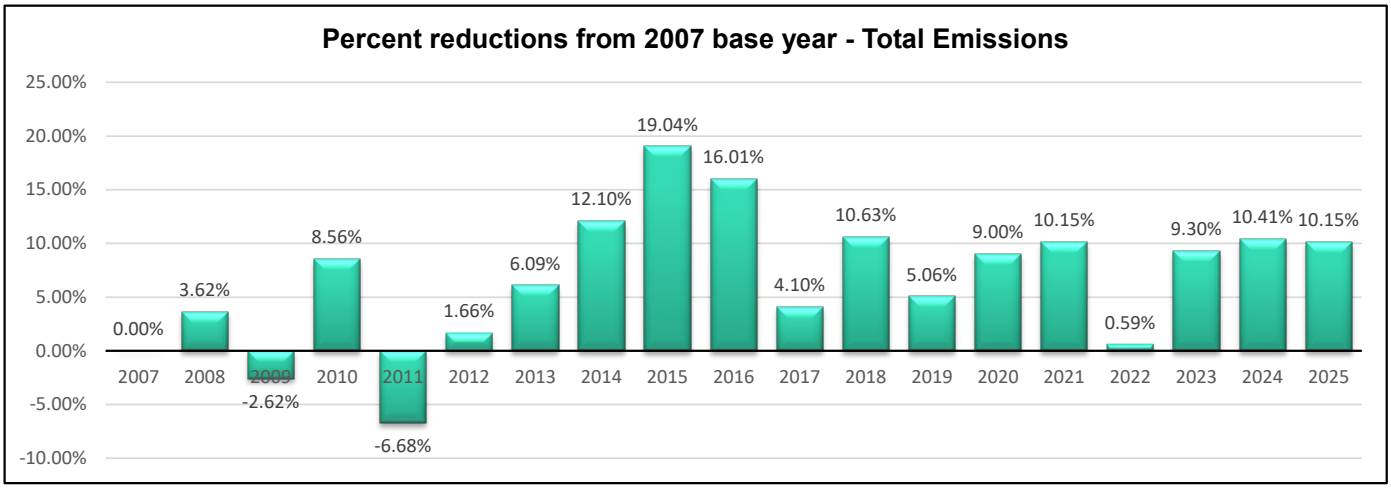
Carbon Emissions and Campus Size

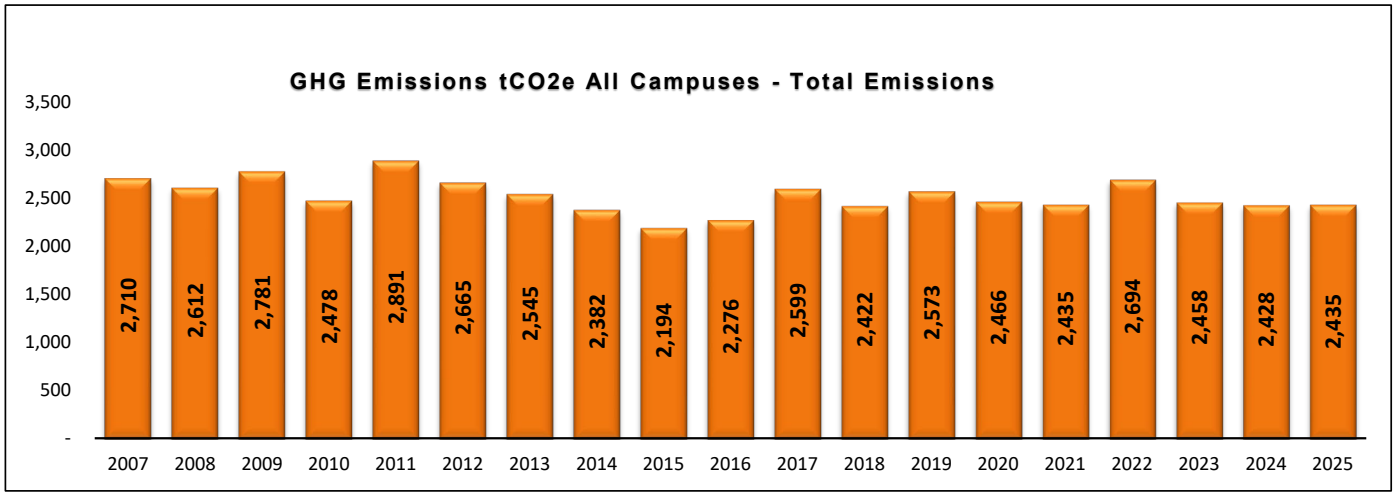


Note: these carbon emissions values by campus are estimated and actual values may vary



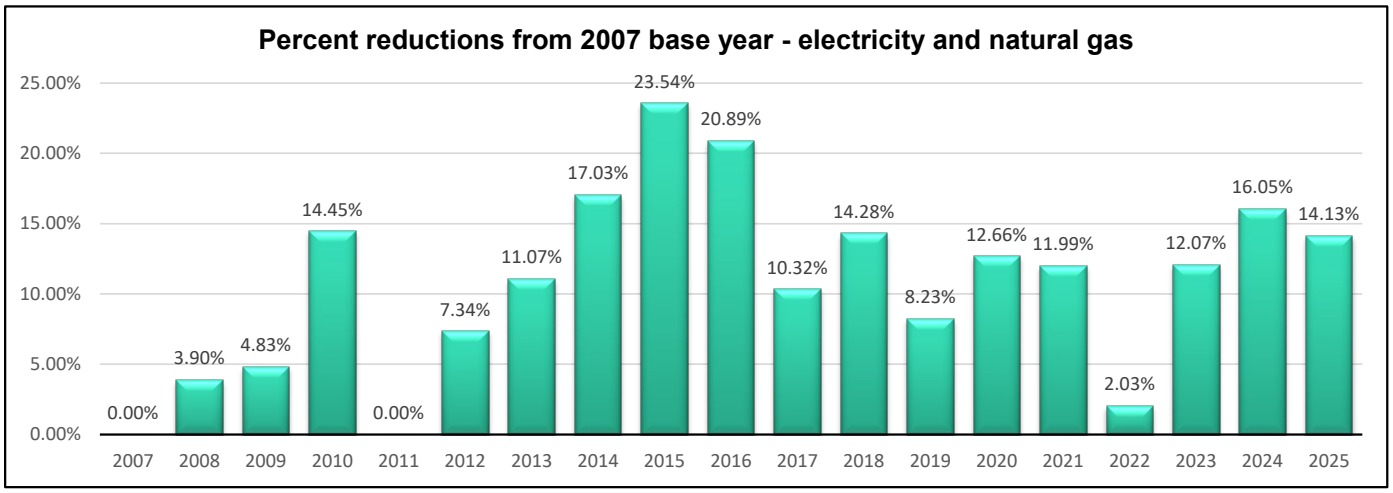
Performance Tracking - Carbon Emissions Reductions from 2007 Base Year (All Emissions)

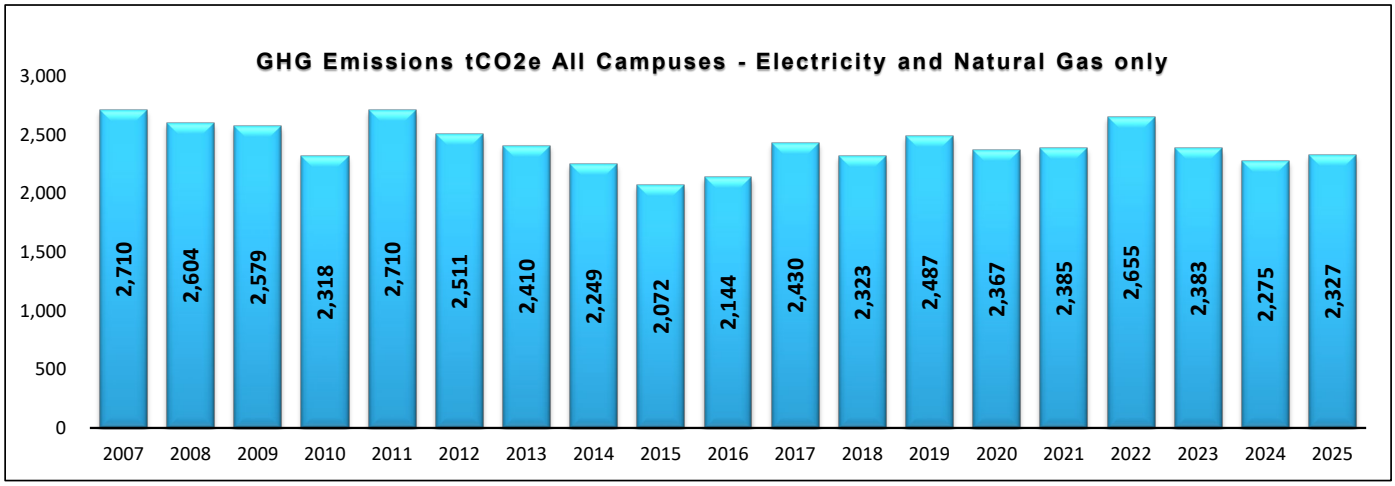




Total emissions are from CGRT and include: fleet fuel, paper, refrigerant fugitive emissions and in 2024 Fugitive Emissions for Refrigerants was added and they increased emissions by 90.1 tCO2e and

Performance Tracking - Carbon Emissions Reductions from 2007 Base Year (Electricity and Natural Gas only)





Civic Centre Campus - Summary

	Area	Electric	Gas		Total	Energy Intensity					Compared to 2007	
	M2	kWh	GJ	ekWh	ekWh	Electric kWh/M2	Gas ekWh/M2	Total ekWh/M2	Total eGJ/M2	Gas GJ/M2	Electric	Gas
2019	4,391	465,803			465,803	106		106	0.38			
2020	4,391	473,343			473,343	108		108	0.39			
2021	4,391	1,093,558			1,093,558	249		249	0.90			
2022	4,391	879,756			879,756	200		200	0.72			
2023	4,391	923,024			923,024	210		210	0.76			
2024	4,391	804,261			804,261	183		183	0.66			
2025	4,391	936,125			936,125	213		213	0.77			

Note: Landlord invoices higher in 2021 than previous years. Electric meter missed during construction installed, previous amounts of energy used assigned to 2025.

Cloverdale Campus - Summary

	Area	Electric	Gas		Total	Energy Intensity					Compared to 2007	
	M2	kWh	GJ	ekWh	ekWh	Electric kWh/M2	Gas ekWh/M2	Total ekWh/M2	Total eGJ/M2	Gas GJ/M2	Electric	Gas
2007	18,559	1,530,877	6,453	1,792,532	3,323,409	82	97	179	0.64	0.35	0%	0%
2008	18,559	1,437,224	6,398	1,777,448	3,214,672	77	96	173	0.62	0.34	-6%	-1%
2009	18,559	1,430,400	6,873	1,909,431	3,339,831	77	103	180	0.65	0.37	-7%	7%
2010	18,559	1,443,600	6,009	1,669,189	3,112,789	78	90	168	0.60	0.32	-6%	-7%
2011	18,559	1,483,200	7,244	2,012,494	3,495,694	80	108	188	0.68	0.39	-3%	12%
2012	18,559	1,499,400	6,878	1,910,681	3,410,081	81	103	184	0.66	0.37	-2%	7%
2013	18,559	1,451,800	7,305	2,029,357	3,481,157	78	109	188	0.68	0.39	-5%	13%
2014	18,559	1,393,200	6,656	1,848,926	3,242,126	75	100	175	0.63	0.36	-9%	3%
2015	18,559	1,499,400	6,357	1,765,891	3,265,291	81	95	176	0.63	0.34	-2%	-1%
2016	18,559	1,504,309	6,638	1,844,092	3,348,401	81	99	180	0.65	0.36	-2%	3%
2017	18,559	1,569,600	7,422	2,061,748	3,631,348	85	111	196	0.70	0.40	3%	15%
2018	18,559	1,618,944	6,439	1,788,615	3,407,559	87	96	184	0.66	0.35	6%	0%
2019	18,559	1,657,200	6,878	1,910,653	3,567,853	89	103	192	0.69	0.37	8%	7%
2020	18,559	1,450,219	6,685	1,857,121	3,307,340	78	100	178	0.64	0.36	-5%	4%
2021	18,559	1,482,045	7,019	1,949,739	3,431,784	80	105	185	0.67	0.38	-3%	9%
2022	18,559	1,499,397	7,459	2,072,110	3,571,507	81	112	192	0.69	0.40	-2%	16%
2023	18,559	1,442,153	6,617	1,838,314	3,280,466	78	99	177	0.64	0.36	-6%	3%
2024	18,559	1,443,600	6,177	1,715,859	3,159,459	78	92	170	0.61	0.33	-6%	-4%
2025	18,559	1,495,800	5,937	1,649,299	3,145,099	81	89	169	0.61	0.32	-2%	-8%

Garden City Road Farm

	Area	Electric	Gas		Total	Energy Intensity					Compared to 2007	
	M2	kWh	GJ	ekWh	ekWh	Electric kWh/M2	Gas ekWh/M2	Total ekWh/M2	Total eGJ/M2	Gas GJ/M2	Electric	Gas
2022	184	4,426			4,426	24		24	0.09			
2023	184	12,396			12,396	67		67	0.24			
2024	184	12,196			12,196	66		66	0.24			
2025	184	23,077			23,077	125		125	0.45			

Langley Campus (Main) - Summary

	Area	Electric	Gas		Total	Energy Intensity					Compared to 2007	
	M2	kWh	GJ	ekWh	ekWh	Electric kWh/M2	Gas ekWh/M2	Total ekWh/M2	Total eGJ/M2	Gas GJ/M2	Electric	Gas
2007	15,008	1,413,000	8,908	2,474,531	3,887,531	94	165	259	0.93	0.59	0%	0%
2008	15,383	1,337,400	8,448	2,346,966	3,684,366	87	153	240	0.86	0.55	-5%	-5%
2009	15,383	1,679,400	8,820	2,450,307	4,129,707	109	159	268	0.97	0.57	19%	-1%
2010	15,808	1,792,800	8,191	2,275,410	4,068,210	113	144	257	0.93	0.52	27%	-8%
2011	15,808	1,753,200	9,628	2,674,686	4,427,886	111	169	280	1.01	0.61	24%	**8%**
2012	15,808	1,906,200	9,170	2,547,537	4,453,737	121	161	282	1.01	0.58	35%	**3%**
2013	17,143	2,113,200	9,399	2,611,098	4,724,298	123	152	276	0.99	0.55	50%	**6%**
2014	17,143	2,100,312	8,802	2,445,307	4,545,619	123	143	265	0.95	0.51	49%	-1%
2015	17,143	2,178,000	8,326	2,312,852	4,490,852	127	135	262	0.94	0.49	54%	-7%
2016	17,538	1,868,400	7,984	2,218,039	4,086,439	107	126	233	0.84	0.46	32%	-10%
2017	17,538	2,327,400	9,753	2,709,439	5,036,839	133	154	287	1.03	0.56	65%	9%
2018	17,538	2,315,995	8,785	2,440,417	4,756,412	132	139	271	0.98	0.50	64%	-1%
2019	17,538	2,289,504	8,157	2,265,987	4,555,491	131	129	260	0.94	0.47	62%	-8%
2020	17,538	1,983,492	7,343	2,039,941	4,023,433	113	116	229	0.83	0.42	40%	-18%
2021	17,538	2,048,074	7,557	2,099,362	4,147,436	117	120	236	0.85	0.43	45%	-15%
2022	17,538	2,089,200	8,517	2,366,023	4,455,223	119	135	254	0.91	0.49	48%	-4%
2023	17,538	2,025,000	7,219	2,005,494	4,030,494	115	114	230	0.83	0.41	43%	-19%
2024	17,538	1,908,000	6,414	1,781,893	3,689,893	109	102	210	0.76	0.37	35%	-28%
2025	17,538	1,911,600	6,388	1,774,586	3,686,186	109	101	210	0.76	0.36	35%	-28%

Langley Campus (Horticulture) - Summary

	Area	Electric	Gas		Total	Energy Intensity					Compared to 2007	
	M2	kWh	GJ	ekWh	ekWh	Electric kWh/M2	Gas ekWh/M2	Total ekWh/M2	Total eGJ/M2	Gas GJ/M2	Electric	Gas
2007	3,107	266,800	3,924	1,090,004	1,356,804	86	351	437	1.57	1.26	0%	0%
2008	3,107	259,800	3,845	1,068,058	1,327,858	84	344	427	1.54	1.24	-3%	-2%
2009	3,107	258,000	4,001	1,111,478	1,369,478	83	358	441	1.59	1.29	-3%	2%
2010	3,107	275,600	4,473	1,242,599	1,518,199	89	400	489	1.76	1.44	3%	14%
2011	3,107	395,200	6,340	1,761,224	2,156,424	127	567	694	2.50	2.04	48%	62%
2012	3,865	449,800	6,021	1,672,634	2,122,434	116	433	549	1.98	1.56	69%	53%
2013	3,865	394,800	7,157	1,988,270	2,383,070	102	514	617	2.22	1.85	48%	82%
2014	3,865	389,200	7,292	2,025,606	2,414,806	101	524	625	2.25	1.89	46%	86%
2015	3,865	261,400	6,053	1,681,523	1,942,923	68	435	503	1.81	1.57	-2%	54%
2016	3,865	251,460	5,556	1,543,540	1,795,000	65	399	464	1.67	1.44	-6%	42%
2017	3,865	360,600	6,062	1,683,912	2,044,512	93	436	529	1.90	1.57	35%	54%
2018	3,865	295,168	5,207	1,446,560	1,741,728	76	374	451	1.62	1.35	11%	33%
2019	3,865	314,515	5,537	1,538,262	1,852,777	81	398	479	1.73	1.43	18%	41%
2020	3,865	302,243	5,110	1,419,530	1,721,773	78	367	445	1.60	1.32	13%	30%
2021	3,865	309,903	5,217	1,449,283	1,759,186	80	375	455	1.64	1.35	16%	33%
2022	3,865	402,570	4,730	1,313,994	1,716,564	104	340	444	1.60	1.22	51%	21%
2023	3,865	399,000	5,060	1,405,585	1,804,585	103	364	467	1.68	1.31	50%	29%
2024	3,865	540,600	5,104	1,417,891	1,958,491	140	367	507	1.82	1.32	103%	30%
2025	3,865	528,600	4,480	1,244,544	1,773,144	137	322	459	1.65	1.16	98%	14%

Richmond Campus - Summary

	Area	Electric	Gas		Total	Energy Intensity					Compared to 2007	
	M2	kWh	GJ	ekWh	ekWh	Electric kWh/M2	Gas ekWh/M2	Total ekWh/M2	Total eGJ/M2	Gas GJ/M2	Electric	Gas
2007	28,541	2,898,000	12,767	3,546,756	6,444,756	102	124	226	0.81	0.45	0%	0%
2008	28,541	2,678,400	11,131	3,092,053	5,770,453	94	108	202	0.73	0.39	-8%	-13%
2009	28,541	2,664,000	9,590	2,664,130	5,328,130	93	93	187	0.67	0.34	-8%	-25%
2010	28,541	2,581,200	8,743	2,428,750	5,009,950	90	85	176	0.63	0.31	-11%	-32%
2011	28,541	2,613,600	10,817	3,005,074	5,618,674	92	105	197	0.71	0.38	-10%	-15%
2012	28,541	2,581,200	8,609	2,391,691	4,972,891	90	84	174	0.63	0.30	-11%	-33%
2013	28,541	2,581,200	8,390	2,330,742	4,911,942	90	82	172	0.62	0.29	-11%	-34%
2014	28,541	2,590,447	8,499	2,361,078	4,951,525	91	83	173	0.62	0.30	-11%	-33%
2015	28,541	2,603,243	7,957	2,210,371	4,813,615	91	77	169	0.61	0.28	-10%	-38%
2016	28,541	2,498,073	7,899	2,194,259	4,692,332	88	77	164	0.59	0.28	-14%	-38%
2017	28,541	2,613,600	10,726	2,979,627	5,593,227	92	104	196	0.71	0.38	-10%	-16%
2018	28,541	3,220,410	9,313	2,587,124	5,807,534	113	91	203	0.73	0.33	11%	-27%
2019	34,696	3,136,492	9,951	2,764,388	5,900,880	90	80	170	0.61	0.29	8%	-22%
2020	34,696	2,504,634	10,015	2,782,167	5,286,801	72	80	152	0.55	0.29	-14%	-22%
2021	34,696	2,671,805	9,820	2,727,857	5,399,662	77	79	156	0.56	0.28	-8%	-23%
2022	34,696	2,939,025	11,754	3,265,261	6,204,286	85	94	179	0.64	0.34	1%	-8%
2023	34,696	3,129,055	10,072	2,797,863	5,926,917	90	81	171	0.61	0.29	8%	-21%
2024	34,696	2,961,600	9,107	2,529,952	5,491,552	85	73	158	0.57	0.26	2%	-29%
2025	34,696	3,018,000	8,297	2,304,907	5,322,907	87	66	153	0.55	0.24	4%	-35%

Surrey Campus - Summary

	Area	Electric	Gas		Total	Energy Intensity					Compared to 2007	
	M2	kWh	GJ	ekWh	ekWh	Electric kWh/M2	Gas ekWh/M2	Total ekWh/M2	Total eGJ/M2	Gas GJ/M2	Electric	Gas
2007	27,415	4,131,000	15,006	4,168,722	8,299,722	151	152	303	1.09	0.55	0%	0%
2008	32,635	4,225,734	16,487	4,580,172	8,805,906	129	140	270	0.97	0.51	2%	10%
2009	36,392	4,626,800	16,119	4,477,755	9,104,555	127	123	250	0.90	0.44	12%	7%
2010	36,392	4,618,063	13,626	3,785,358	8,403,421	127	104	231	0.83	0.37	12%	-9%
2011	36,392	4,717,800	14,481	4,022,822	8,740,622	130	111	240	0.86	0.40	14%	-3%
2012	36,392	4,867,200	13,782	3,828,640	8,695,840	134	105	239	0.86	0.38	18%	-8%
2013	36,392	4,816,800	12,643	3,512,114	8,328,914	132	97	229	0.82	0.35	17%	-16%
2014	36,392	4,674,600	13,169	3,658,265	8,332,865	128	101	229	0.82	0.36	13%	-12%
2015	36,392	4,629,600	11,446	3,179,727	7,809,326	127	87	215	0.77	0.31	12%	-24%
2016	36,392	4,698,327	11,446	3,179,727	7,878,054	129	87	216	0.78	0.31	14%	-24%
2017	36,392	4,822,200	12,468	3,463,527	8,285,727	133	95	228	0.82	0.34	17%	-17%
2018	36,392	5,234,875	14,078	3,910,980	9,145,855	144	107	251	0.90	0.39	27%	-6%
2019	38,518	5,190,436	16,516	4,588,173	9,778,609	135	119	254	0.91	0.43	26%	10%
2020	38,518	4,032,273	15,985	4,440,494	8,472,767	105	115	220	0.79	0.41	-2%	7%
2021	38,518	3,907,759	15,997	4,444,022	8,351,781	101	115	217	0.78	0.42	-5%	7%
2022	38,518	4,499,071	17,949	4,986,232	9,485,303	117	129	246	0.89	0.47	9%	20%
2023	38,518	4,431,600	15,695	4,360,043	8,791,643	115	113	228	0.82	0.41	7%	5%
2024	38,518	4,350,600	14,584	4,051,519	8,402,119	113	105	218	0.79	0.38	5%	-3%
2025	38,518	4,275,000	12,436	3,454,721	7,729,721	111	90	201	0.72	0.32	3%	-17%

Civic Centre Campus - Electrical Consumption (no gas for this site)

ELECTRIC CONSUMPTION - kWh

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2019	24134	19542	21858	19235	22378	64115	79090	72159	67220	30298	22825	22949	**465803**
2020	45189	40896	41085	39095	39149	37795	38002	37757	37317	40350	38098	38610	**473343**
2021	102559	101104	93299	90139	90404	89669	89915	83873	83339	84352	84165	100740	**1093558**
2022	55883	54507	62549	63100	68292	80533	100705	105390	89163	84598	57462	57574	**879756**
2023	60861	53418	63263	66671	90751	87603	105834	120865	82837	85997	51513	53410	**923024**
2024	61538	53704	52655	48675	66310	78530	113081	97447	74616	50183	51574	55948	**804261**
2025	65596	57152	56002	49381	70246	82720	112332	131756	104813	73249	50960	81918	**936125**

Note: Landlord invoices higher in 2021 than previous years. Electric meter missed during construction installed, previous amounts of energy used assigned to 2025.

Cloverdale Campus - Electrical Consumption

ELECTRIC CONSUMPTION - kWh **Acct #: 6216372**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	107377	140400	136800	142200	127800	127800	120600	113400	104400	133200	136800	140100	**1530877**
2008	136800	154800	129600	142200	117000	100800	108430	104794	102600	104400	115200	120600	**1437224**
2009	126000	124200	135000	103800	109800	109800	118800	108000	109800	133200	133200	118800	**1430400**
2010	131400	117000	124200	115200	108000	113400	115200	111600	117000	115200	136800	138600	**1443600**
2011	138600	133200	136800	117000	109800	118800	108000	109800	126000	117000	133200	135000	**1483200**
2012	118800	136800	142200	124200	111600	113400	120600	122400	126000	115200	131400	136800	**1499400**
2013	118800	135000	117000	118000	115200	109800	122400	138600	115200	118800	120600	122400	**1451800**
2014	109800	135000	115200	117000	111600	117000	120600	118800	115200	104400	117000	111600	**1393200**
2015	118800	115200	111600	106200	133200	142200	135000	124200	129600	126000	129600	127800	**1499400**
2016	69709	135000	126000	127800	126000	126000	133200	120600	131400	131400	133200	144000	**1504309**
2017	124200	138600	131400	131400	131400	120600	129600	124200	133200	144000	135000	126000	**1569600**
2018	133200	132527	136678	126818	141542	130534	134479	139685	125168	138833	141309	138171	**1618944**
2019	134940	137253	149880	129679	131400	130298	129630	140820	137100	149760	146297	140143	**1657200**
2020	133200	136568	128272	95781	103779	113569	128231	126075	115965	124560	123445	120774	**1450219**
2021	114919	113337	124016	116609	120212	122645	134452	122734	122525	131194	126361	133041	**1482045**
2022	129362	119402	127336	113524	116102	117306	141212	142699	127828	120050	120098	124478	**1499397**
2023	126003	115211	127825	111620	127814	120621	127830	126035	109840	111647	126053	111654	**1442153**
2024	127800	124200	117000	113400	118800	111600	135000	120600	115200	126000	118800	115200	**1443600**
2025	135000	122400	124200	117000	124200	122400	135000	126000	126000	124200	118800	120600	**1495800**

Cloverdale Campus - Gas Consumption

GAS CONSUMPTION - GJ **Acct #: 1515702**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	1,099	1,136	772	363	163	45	27	25	189	547	978	1,109	**6453**
2008	1,432	979	673	262	262	176	40	53	119	510	716	1,178	**6398**
2009	1,321	969	1,035	483	280	74	24	24	103	498	808	1,254	**6873**
2010	847	725	760	484	336	139	30	32	147	418	1,010	1,081	**6009**
2011	1238	1144	876	685	400	104	34	31	97	508	1,012	1,115	**7244**
2012	1343	1009	963	492	270	178	45	37	82	503	835	1122	**6878**
2013	1453	1035	835.2	554	216	83	37	35	168	659	944	1287	**7305**
2014	1247	1184	880	491	164	63	33	32	84	408	972	1097	**6656**
2015	1156	783	731	569	185	77	30	28	216	468	1040	1075	**6357**
2016	1216	963	845	405	135	110	33	34	178	574	826	1319	**6638**
2017	1383	1094	1014	647	380	50	35	37	160	548	902	1172	**7422**
2018	1165	1119	872	575	233	166	30	32	138	479	732	899	**6439**
2019	1041	1282	804	520	196	86	33	34	163	792	989	940	**6878**
2020	1299	1060	957	467	202	150	65	24	29	508	946	979	**6685**
2021	1074	1162	875	436	269	69	23	23	178	703	887	1320	**7019**
2022	1282	1013	877	656	435	134	157	28	40	314	1096	1427	**7459**
2023	1185	1129	930	685	205	107	32	33	37	491	955	829	**6617**
2024	1271	941	786	517	256	68	27	25	72	464	820	930	**6177**
2025	1358	1172	803	415	185	12	3	1	6	425	720	837	**5937**

Garden City Farm - Electrical Consumption (no gas for this site)

ELECTRIC CONSUMPTION - kWh

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2022	0	0	0	0	0	0	263	741	739	816	843	1024	**4426**
2023	981	1374	1560	1548	855	877	984	1026	809	822	886	674	**12396**
2024	952	1390	1472	1015	820	865	1143	1034	927	895	939	744	**12196**
2025	1133	1854	2782	1357	1775	1531	2519	2464	2212	2003	1730	1717	**23077**

Langley Campus (Main) - Electrical Consumption

ELECTRIC CONSUMPTION - kWh **Acct #: 2134-2602-481**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	131400	142200	124200	117000	104400	84600	102600	109800	118800	122400	131400	124200	**1413000**
2008	135000	122400	124200	93600	104400	88200	84600	84600	124200	129600	124200	122400	**1337400**
2009	138600	138600	140400	122400	109800	136800	149400	129600	136800	154800	156600	165600	**1679400**
2010	165600	140400	131400	145800	127800	122400	149400	163800	158400	147600	172800	167400	**1792800**
2011	167400	165600	162000	14400	162000	142200	138600	151200	158400	178200	160200	153000	**1753200**
2012	156600	149400	138600	163800	138600	133200	153000	160200	172800	196200	169200	174600	**1906200**
2013	176400	167400	176400	174600	154800	165600	171000	187200	176400	212400	167400	183600	**2113200**
2014	182964	176400	174600	154800	165600	171000	187200	176400	212400	167400	183600	147948	**2100312**
2015	201600	174600	174600	194400	183600	183600	196200	172800	181800	185400	172800	156600	**2178000**
2016	216000	176400	178200	192600	165600	181800	181800	187200	194400	207000	180000	189000	**1868400**
2017	185400	185400	196200	183600	167400	212400	194400	205200	230400	192600	183600	190800	**2327400**
2018	192488	173413	188625	179266	196491	201844	227555	214781	195743	189846	183996	171947	**2315995**
2019	191148	171964	193444	169863	198413	195000	207900	201000	193479	200477	193723	173093	**2289504**
2020	187900	182328	178586	149914	167220	165420	172485	159696	156339	147465	156735	159404	**1983492**
2021	174105	158131	170063	150420	153997	161783	170738	163159	167516	191925	191421	194816	**2048074**
2022	199198	178272	181808	155486	156480	166995	174765	191822	173188	175230	171099	164857	**2089200**
2023	171000	156600	171000	149400	172800	171000	190800	181800	165600	169200	169200	156600	**2025000**
2024	167400	156600	163800	151200	160200	154800	181800	167400	154800	153000	153000	144000	**1908000**
2025	163800	144000	156600	145800	154800	162000	180000	174600	172800	158400	151200	147600	**1911600**

Langley Campus (Main) - Gas Consumption

GAS CONSUMPTION - GJ **Acct #: 1180023**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	1776	1104	997	695	318	26	22	26	258	819	1271	1595	**8908**
2008	1533	1142	1072	790	341	205	9	11	79	755	908	1604	**8448**
2009	1511	1195	1150	684	334	35	25	25	150	881	1154	1676	**8820**
2010	1244	995	1021	716	469	235	105	32	160	678	1177	1359	**8191**
2011	1491	1427	1106	934	643	287	167	174	304	723	1143	1229	**9628**
2012	1534	1101	1137	669	454	369	296	249	332	763	998	1269	**9170**
2013	1523	1094	997	788	463	320	270	274	400	711	1081	1478	**9399**
2014	1352	1416	1091	707	367	273	156	164	295	547	1143	1292	**8802**
2015	1223	876	863	709	365	258	290	296	471	578	1143	1255	**8326**
2016	1220	902	816	492	383	321	169	161	472	697	868	1,484	**7984**
2017	1519	1241	1064	716	530	418	335	298	409	767	978	1,479	**9753**
2018	1270	1213	1030	751	473	448	213	302	435	642	835	1172	**8785**
2019	1171	1439	881	550	287	268	174	191	308	758	980	1151	**8157**
2020	1289	1132	1056	595	266	255	120	103	156	498	861	1013	**7343**
2021	1029	1113	863	485	313	144	51	112	283	701	927	1538	**7557**
2022	1332	1105	904	724	473	211	109	81	232	497	1188	1661	**8517**
2023	1136	1078	1006	743	222	212	109	106	236	538	958	875	**7219**
2024	1261	864	771	522	328	227	47	89	193	458	753	901	**6414**
2025	1219	1174	771	421	276	150	34	38	152	524	748	881	**6388**

Langley Campus (Horticulture) - Electrical Consumption

ELECTRIC CONSUMPTION - kWh **Acct #: 2134-2600-531**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	24800	26800	27200	26600	20800	16600	15600	16200	19800	22000	24600	25800	**266800**
2008	30400	27000	26200	23000	16200	12800	13200	15000	20400	22800	22200	30600	**259800**
2009	25800	26000	28600	20800	14800	12800	11400	17000	18400	23000	27400	32000	**258000**
2010	28400	25400	25200	26000	18200	12400	12600	16200	21000	24000	31600	34600	**275600**
2011	34600	35400	36600	37400	43200	25600	20800	19600	15600	45600	51200	29600	**395200**
2012	61800	58600	44000	38200	42000	29400	35200	23400	26200	27000	31800	32200	**449800**
2013	40000	39800	43400	41200	32000	31600	30400	23400	22600	27600	27600	35200	**394800**
2014	43329	43400	41200	32000	31600	30400	23400	22600	27600	27600	35200	30871	**389200**
2015	26200	25600	22600	23200	19200	16800	18200	18400	20000	28800	20800	21600	**261400**
2016	30060	24600	30600	32200	22800	20000	22600	22800	19400	24200	30600	34400	**251460**
2017	40400	35400	38600	35200	31600	27800	25600	21800	25000	22800	24000	32400	**360600**
2018	30043	28937	31194	27227	20470	18439	19407	18833	22328	24137	25405	28748	**295168**
2019	31579	30390	27971	27842	25958	21233	19683	20417	24023	27104	28027	30288	**314515**
2020	32615	29776	26457	20893	22190	24120	20990	19222	20828	26956	28204	29992	**302243**
2021	35336	32309	31117	24884	23379	18749	16138	14155	18389	26730	32316	36401	**309903**
2022	38902	33963	36044	40480	35040	27749	27411	28099	22296	28125	38738	45723	**402570**
2023	45400	42600	40000	35200	20800	19800	19200	22800	25800	34200	45200	48000	**399000**
2024	62600	51400	49000	36000	30200	26800	28000	30000	34200	58000	67800	66600	**540600**
2025	72400	62600	62400	47800	37800	25600	20800	23200	33200	47600	49800	45400	**528600**

Langley Campus (Horticulture) - Gas Consumption

GAS CONSUMPTION - GJ **Acct #: 11880022**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	507	422	407	304	272	251	192	233	240	271	337	489	**3924**
2008	568	475	421	378	216	186	187	180	217	256	217	543	**3845**
2009	510	399	450	373	301	194	122	113	217	320	336	667	**4001**
2010	476	422	374	307	269	153	130	144	221	315	775	887	**4473**
2011	909	871	621	511	377	300	257	225.9	332	388	725	823	**6340**
2012	938	749	787	453	295	237	203	201	250	373	677	859	**6021**
2013	1078	798	810	686	473	314	243	207	341	546	691	971	**7157**
2014	993	996	756	897	520	375	217	207	247	415	745	923	**7292**
2015	895	680	743	614	422	232	134	145	242	309	741	896	**6053**
2016	889	681	656	497	222	161	113	110	203	356	565	1104	**5556**
2017	1100	920	750	551	278	87	56	68	163	499	574	1016	**6062**
2018	796	819	717	472	160	130	91	130	210	376	540	767	**5207**
2019	800	1036	709	472	194	131	107	119	184	495	572	719	**5537**
2020	867	698	645	384	226	207	144	116	140	359	545	780	**5110**
2021	914	860	739	363	262	123	73	95	178	414	413	784	**5217**
2022	744	624	487	446	273	173	60	63	171	336	635	718	**4730**
2023	718	781	759	617	259	139	101	98	171	308	562	547	**5060**
2024	847	672	594	430	260	153	93	108	187	412	570	777	**5104**
2025	901	643	511	347	175	80	91	101	133	377	503	618	**4480**

Newton Campus - Electrical Consumption (Closed but part of 2007 Base Year)

ELECTRIC CONSUMPTION - kWh — **Acct #: 2074 2501 692**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	112002	55423	39550	34511	32752	37792	29970	30930	28798	29038	28060	28610	**487434**
2008	6941	27625	16825	13633	22034	19680	22800	25229	20160	19920	21219	25440	**241506**
2009	21600	24960	6720	6000	6480	12857	12857	12857	12857	12857	12857	12857	**155759**
2010	5800	5800	5800	5800	5800	5800	**Campus Shut Down**						**34800**

Newton Campus - Gas Consumption (Closed but part of 2007 Base Year)

GAS CONSUMPTION - GJ — **Acct #: 879065 & 879066**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	736	483	143	120	30	19	16	33	38	174	237	237	**2264**
2008	183	137	153	100	21	9	12	9	30	117	93	285	**1149**
2009	196	148	115	28	168	56	142	2	2	52	190	138	**1238**
2010	125	135	90	41	12	2	**Campus shut down**						**405**

Richmond Campus - Electrical Consumption

ELECTRIC CONSUMPTION - kWh — **Acct #: 1944-3200-032**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	223200	183600	266400	291600	234000	226800	252000	234000	262800	259200	255600	208800	**2898000**
2008	212400	223200	262800	219600	208800	187200	230400	198000	230400	241200	255600	208800	**2678400**
2009	219600	226800	208800	205200	234000	226800	226800	230400	212400	248400	205200	219600	**2664000**
2010	198000	223200	212400	212400	201600	230400	237600	219600	223200	212400	198000	212400	**2581200**
2011	212400	205200	216000	226800	187200	201600	226800	223200	248400	223200	234000	208800	**2613600**
2012	234000	198000	219600	212400	201600	190800	212400	216000	244800	212400	223200	216000	**2581200**
2013	205200	208800	205200	219600	194400	205200	223200	226800	255600	208800	226800	201600	**2581200**
2014	208800	205200	219600	194400	205200	223200	226800	255600	208800	226800	201600	214447	**2590447**
2015	356516	194400	219600	208800	208800	259200	205200	205200	237600	237600	183600	86727	**2603243**
2016	104073	234000	187200	230400	219600	194400	234000	241200	223200	223200	212400	194400	**2498073**
2017	129600	212400	201600	223200	201600	205200	234000	223200	266400	230400	237600	248400	**2613600**
2018	284972	245483	266760	250709	261481	262770	299280	289800	267720	276439	265783	249213	**3220410**
2019	266949	245747	269053	247697	267038	259643	269220	271470	261463	267878	263104	247230	**3136492**
2020	241316	234008	236331	211749	208343	208418	236970	232470	209259	135696	165546	184528	**2504634**
2021	206710	193342	222291	219544	226166	219800	227280	231968	225434	235005	227533	236732	**2671805**
2022	242602	219346	243954	243761	254325	246263	254338	254200	247050	253607	244481	235098	**2939025**
2023	243078	224086	250538	228662	275280	278960	304360	303360	268854	259574	255813	236491	**3129055**
2024	254400	231600	246000	229200	240000	234000	300000	272400	249600	240000	242400	222000	**2961600**
2025	249600	218400	242400	228000	253200	254400	288000	276000	278400	254400	255600	219600	**3018000**

Richmond Campus - Gas Consumption

GAS CONSUMPTION - GJ — **Acct #: 1179620**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	2094	1559	1821	1196	562	133	161	108	472	1137	1610	1915	**12767**
2008	2137	1625	1574	1263	533	182	70	64	270	884	**1002**	**1528**	**11131**
2009	1556	1217	1312	824	497	263	218	61	121	813	1109	1599	**9590**
2010	1177	1064	1129	873	489	272	68	66	218	730	1293	1364	**8743**
2011	1458	1428	1255	1083	846	313	230	214	239	853	1367	1531	**10817**
2012	1547	1275	1242	770	339	203	66	56	105	721	963	1325	**8609**
2013	1468	1071	898	779	155	65	57	60	357	802	1140	1539	**8390**
2014	1389	1399	1078	688	333	173	68	69	167	605	1223	1308	**8499**
2015	1389	956	963	800	272	71	44	42	339	646	1154	1282	**7957**
2016	1336	1039	1022	621	380	59	45	43	159	765	851	1581	**7899**
2017	1617	1334	1200	776	358	55	45	48	165	1109	1658	2362	**10726**
2018	1592	1510	1392	981	211	80	59	72	357	755	1040	1265	**9313**
2019	1297	1704	1157	894	530	201	77	80	315	1075	1262	1360	**9951**
2020	1765	1647	1580	1023	309	142	110	95	41	894	1189	1221	**10015**
2021	1404	1466	1172	713	50	50	64	69	281	980	1323	2249	**9820**
2022	2011	1573	1370	1167	791	226	191	188	236	678	1492	1831	**11754**
2023	1347	1316	1218	970	450	438	299	313	477	655	1346	1244	**10072**
2024	1627	1191	1054	785	356	208	159	189	243	866	1194	1235	**9107**
2025	1655	1704	1197	681	169	21	18	18	42	613	897	1282	**8297**

Surrey Campus - Electrical Consumption

ELECTRIC CONSUMPTION - kWh **Acct #: 2073 1199 121**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	297000	336600	349200	370800	307800	334800	356400	336600	345600	363600	390600	342000	**4131000**
2008	370800	354600	338400	394200	318600	336600	405000	304200	346734	342000	343800	370800	**4225734**
2009	426600	380600	379800	358200	363600	369000	343800	394200	338400	426600	430200	415800	**4626800**
2010	392400	385200	392400	342000	374400	360000	363600	401400	387000	363600	424800	431263	**4618063**
2011	430200	372600	441000	405000	349200	397800	361800	342000	403200	376200	444600	394200	**4717800**
2012	419400	396000	455400	428400	336600	397800	372600	381600	412200	412200	412200	442800	**4867200**
2013	392400	482400	381600	419400	360000	372600	378000	419400	387000	381600	421200	421200	**4816800**
2014	414000	419400	383400	378000	369000	372600	374400	432000	374400	383400	392400	381600	**4674600**
2015	525927	369000	403200	316800	376200	437400	406800	367200	396000	385200	387000	258873	**4629600**
2016	147927	423000	392400	433800	363600	401400	412200	414000	433800	408600	406800	460800	**4698327**
2017	421200	423000	437400	385200	349200	378000	365400	408600	392400	397800	455400	408600	**4822200**
2018	439107	412311	447081	397914	402426	411300	505275	506445	426236	429904	430697	426179	**5234875**
2019	447246	433357	463415	407432	429773	425734	457046	458280	405930	413670	422109	426444	**5190436**
2020	443789	429598	386978	309905	291677	271980	306000	318660	292159	309341	326061	346125	**4032273**
2021	352461	310593	304080	260375	277607	320018	362160	335048	318833	346043	349795	370746	**3907759**
2022	383414	355395	385087	345600	349087	360893	406020	406744	369416	371115	378354	387946	**4499071**
2023	388800	367200	394200	345600	378000	369000	397800	381600	342000	351000	367200	349200	**4431600**
2024	396000	369000	372600	331200	343800	340200	414000	358200	347400	360000	365400	352800	**4350600**
2025	390600	370800	360000	320400	327600	354600	396000	372600	351000	351000	343800	336600	**4275000**

Surrey Campus - Gas Consumption

GAS CONSUMPTION - GJ **Acct #: 1179620**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2007	2409	1806	1784	1329	795	485	91	105	618	1301	1940	2343	**15006**
2008	2835	2010	2130	1505	756	619	123	102	578	1224	1529	3078	**16487**
2009	2926	2313	2491	1216	793	153	133	110	244	1212	1632	2896	**16119**
2010	2035	1705	1559	1114	716	565	228	103	425	987	2133	2056	**13626**
2011	2243	2211	1729	1475	905	373	90	234	228	1141	1882	1970	**14481**
2012	2255	1763	1852	1116	739	641	337	140	353	1191	1513	1883	**13782**
2013	2297	1636	1417	1074	558	261	52	56	313	1136	1591	2252	**12643**
2014	2030	2128	1506	961	521	279	128	136	361	786	1656	2679	**13169**
2015	1871	1225	1104	1054	504	238	160	163	507	792	1852	1975	**11446**
2016	2136	1514	1473	760	387	314	168	50	437	1109	1405	2715	**12468**
2017	2697	2168	1860	1255	626	174	28	31	118	587	1611	2577	**13731**
2018	2161	1982	1677	1391	449	261	34	55	497	1248	1853	2471	**14078**
2019	2476	3215	2080	1399	254	100	251	41	556	1651	1980	2513	**16516**
2020	2995	2535	2099	1238	654	309	25	18	121	1067	2310	2613	**15985**
2021	2619	2759	1584	981	642	259	12	22	455	1480	1887	3298	**15997**
2022	2985	2533	2159	1592	1070	454	35	43	209	955	2535	3379	**17949**
2023	2477	2488	2121	1688	581	457	30	41	570	1265	2017	1962	**15695**
2024	2726	1922	1780	1307	834	360	33	46	414	1250	1875	2038	**14584**
2025	2273	2094	1584	952	607	311	29	19	285	1094	1409	1779	**12436**

Campus Sizes in M2 - 2007 to 2024

	Civic	Cloverdale	Newton	Lang - M	Lang - H	Richmond	Surrey	Total	Comments	% size increase vs 2007
2007		18,559	4,015	15,008	3,107	28,541	27,415	**96,645**	N - Closed except Bldg 3/Unit 7(3715)(300) L - Farrier barn closed (375)	
2008		18,559	4,015	15,383	3,107	28,541	32,635	**102,240**	S - Bldg A added (4689)	5%
2009		18,559	4,015	15,383	3,107	28,541	36,392	**105,997**	S - Bldg C added (4319) L - ISH added (425)	9%
2010		18,559	4,015	15,808	3,107	28,541	36,392	**106,422**	N - Closed except Bldg 3/Unit 7(3715)(300) L - Farrier barn closed (375)	9%
2011		18,559	Closed	15,808	3,107	28,541	36,392	**102,407**	L - ISH Greenhouse (758m)	6%
2012		18,559	Closed	15,808	3,865	28,541	36,392	**103,165**	L - CAHS open in Sept (2nd floor added 1335)	6%
2013		18,559	Closed	17,143	3,865	28,541	36,392	**104,500**		8%
2014		18,559	Closed	17,143	3,865	28,541	36,392	**104,500**		8%
2015		18,559	Closed	17,143	3,865	28,541	36,392	**104,500**	L - Brew Lab added (395)	8%
2016		18,559	Closed	17,538	3,865	28,541	36,392	**104,895**		8%
2017		18,559	Closed	17,538	3,865	28,541	36,392	**104,895**		8%
2018		18,559	Closed	17,538	3,865	28,541	36,392	**104,895**	R - WSOD added (6155)	8%
2019	4,391	18,559	Closed	17,538	3,865	34,696	38,518	**117,567**	S-demo old spruce add new spruce 2126 CC - added Civic Center Campus	18%
2020	4,391	18,559	Closed	17,538	3,865	34,696	38,518	**117,567**		18%
2021	4,391	18,559	**GC Farm**	17,538	3,865	34,696	38,518	**117,567**		18%
2022	4,391	18,559	184	17,538	3,865	34,696	38,518	**117,751**		18%
2023	4,391	18,559	184	17,538	3,865	34,696	38,518	**117,751**	Garden City Farm has new electrical service. NOTE: it was not added to the FIS system(184)	18%
2024	4,391	18,559	184	17,538	3,865	34,696	38,518	**117,751**		18%
2025	4,391	18,559	184	17,538	3,865	34,696	38,518	**117,751**		18%