



UBC Okanagan Campus - 2019 Greenhouse Gas Emissions Inventory

Scope	Component	Usage Data		GHG Emissions (tCO ₂ e)
Scope 1 - Direct	Core Buildings [a]			
		Natural Gas for district energy	24,182.74 GJ	1206.07
		Natural gas for direct use	17,155.28 GJ	855.57
		Renewable natural gas (RNG) [b]	85.75 GJ	4.28
		Diesel	166.92 GJ	12.25
		Propane	91.74 GJ	5.61
	Leased Buildings [c]			
		Natural Gas for district energy	N/A GJ	N/A
		Natural gas for direct use	1,571.34 GJ	78.49
		Renewable natural gas (RNG)	N/A GJ	N/A
	Fleet			
		Gasoline	21,057.70 L	51.03
		Diesel	4,333.00 L	12.33
		Biodiesel	N/A L	N/A
		Natural Gas	N/A L	N/A
		Propane	192.00 L	0.29
	Fugitive Emissions			
	HFC R-410a	18.25 KG	38.12	
	HFC R-507	6.80 KG	27.11	
Scope 2 - Indirect	Core Buildings - Electricity for district energy		1,421,584.95 kWh	3.68
	Core Buildings - Electricity		28,194,768.15 kWh	72.98
	Leased Buildings - Electricity		256,393.76 kWh	0.78
Scope 3 - In Scope	Paper	8,943.00 Packages	53.57	
Absolute Campus Emissions under Climate Change Accountability Act (Scope 1, 2, and Paper)				2422
Total Campus Emissions for Offset under Climate Change Accountability Act (Scope 1, 2, and Paper) [d]				2415
Scope 3 - Not required to be offset [e]	Business flights (staff and faculty) [f]			3,528
	Solid Waste [g]			435
	Commuting [g]			9,188
	Buildings LLC [g]			1,215

[a] Core buildings are comprise of academic and administrative buildings.

[d] UBC is required to offset the non-biogenic (CH₄ and N₂O) portions of renewable natural gas.

[c] Leased buildings include facilities leased by and leased out from UBC Okanagan.

[d] Values may not sum precisely due to rounding. This table shows only the Okanagan campus emissions that were offset in 2019.

[e] Scope 3 emission not required for offset.

[f] These emissions have been calculated using historical trends and emissions factors provided through Provincial guidelines. Improvements to methodologies and reporting processes will allow for more accurate Scope 3 reporting in future inventories.

[g] These emissions have been estimated from published conversion factors. Improvements to methodologies may allow for other Scope 3 components to be included in future inventories.

To read the full 2019 Carbon Neutral Action Report (CNAR), please visit:

<https://sustain.ok.ubc.ca/reports/cnar/>