



UBC Okanagan Campus - 2023 Greenhouse Gas Emissions Inventory

Scope	Component	Usage Data		GHG Emissions (tCO <sub>2</sub> e)
Scope 1 - Direct	Core Buildings [a]			
		Natural Gas for district energy	20,369.90 GJ	1,023.00
		Natural gas for direct use	14,420.70 GJ	724.23
		Renewable natural gas (RNG) [b]	3,083.78 GJ	152.89
		Diesel	190.66 GJ	13.65
		Propane	- GJ	-
	Leased Buildings [c]			
		Natural Gas for district energy	N/A GJ	N/A
		Natural gas for direct use	1,866.49 GJ	93.74
		Renewable natural gas (RNG)	N/A GJ	N/A
		Diesel	2.23 GJ	0.16
	Fleet			
		Gasoline	12,507.18 L	37.49
		Diesel	6,577.67 L	14.52
		Biodiesel	N/A L	N/A
		Natural Gas	N/A L	N/A
		Propane	111.97 L	0.23
Fugitive Emissions				
	HFC R-407c	- KG	-	
	HFC R-410a	45.36 KG	87.27	
	HFC R-507	- KG	-	
Scope 2 - Indirect	Core Buildings - Electricity for district energy		1,194,265.73 kWh	13.50
	Core Buildings - Electricity		31,347,034.93 kWh	354.22
	Leased Buildings - Electricity		547,132.32 kWh	6.18
Scope 3 - In Scope	Paper	2,150.00 Packages	12.54	
<b>Absolute Campus Emissions under Climate Change Accountability Act (Scope 1, 2, and Paper)</b>				<b>2,534</b>
<b>Total Campus Emissions for Offset under Climate Change Accountability Act (Scope 1, 2, and Paper) [d]</b>				<b>2,379</b>
Scope 3 - Not required to be offset [e]	Business flights (staff and faculty) [f]			3,464
	Solid Waste [g]			496
	Commuting [g]			9,255
	Buildings LLC [g]			1,429

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

[b] UBC is required to offset the non-biogenic (CH<sub>4</sub> and N<sub>2</sub>O) 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 2023.

[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. 2023 emissions factor increased to include Radiative Forcing Factors.

[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 2023 Carbon Neutral Action Report (CNAR), please visit:

<https://sustain.ok.ubc.ca/reports/#CCAR/>